State Of California **The Resources Agency of California**

Memorandum

Date: December 13, 2002
Telephone: (916) 654-1245

To : Robert Pernell, Presiding Member
William Keese, Associate Member

FROM : **California Energy Commission** - James W. Reede, Jr.
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Sacramento, CA 95814-5512

Subject : El Segundo Power Redevelopment Project, 00-AFC-14, Agreed-to-Conditions of Certification

Pursuant to the 1st Pre-Hearing Conference Order issued by the Committee on November 15th, staff has worked with the applicant, intervenors and other interested parties to resolve remaining issues. These Agreed-to-Conditions of Certification are the result of that effort.

There are 22 Conditions that remain to be resolved by the parties. Of these remaining Conditions, **LAND 4 & 11** and **FACD / GEN 6 & 8** have been agreed to in their base wording with other parties wanting additional language. A table showing these unresolved Conditions is included at the end of this document.

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CONDITIONS OF CERTIFICATION

AIR QUALITY

AQ-C1: The project owner shall submit the resume(s) of their selected Construction Mitigation Manager(s) (CMM) to the CPM for approval. The CMM shall preferably have a minimum of 8 years experience as follows, however the CPM will consider all resumes submitted regardless of experience:

- 5 years construction experience, as a subcontractor or general contractor.
- Must have an engineering degree or equivalent or an additional 5 years construction experience.
- 1 year experience in construction project management.
- 2 year experience in air quality assessment.

The project owner shall make available a dedicated office for the CMM. The CMM shall be responsible for implementing all mitigation measures related to construction, as outlined in Conditions of Certification for construction AQ-C1 through AQ-C4. The CMM shall be on-site or available to be on-site at any time. The CMM will be granted access to all areas of the main and related linear facility construction sites. The CMM shall have the authority to stop construction on either the main or the related linear facility construction sites as warranted by specific mitigation measures. The CMM may not be terminated prior to the cessation of all construction activities unless written approved is granted by the CPM.

Verification: The project owner shall submit the CMM resume at least 60 days prior to site mobilization**.**

AQ-C2 The CMM shall prepare and submit for approval to the CPM, a Fugitive Dust Mitigation Plan that will specifically identify fugitive dust mitigation measures that will be employed during the construction phase of the main and related linear construction sites. The CMM will be responsible for implementing and maintaining all measures identified in the Fugitive Dust Mitigation Plan. The Fugitive Dust Mitigation Plan must address at a minimum the following:

- the identification of the employee parking area(s) and surface of the parking area(s);
- the frequency of watering of unpaved roads;
- the application of chemical dust suppressants;
- the use of gravel in high traffic areas;
- the use of paved access aprons;
- the use of sandbags to prevent run off;
- the use of posted speed limit signs;
- the use of wheel washing areas prior to large trucks leaving the project site;
- the methods that will be used to clean tracked-out mud and dirt from the project site onto public roads;
- for any transportation of borrowed fill material,
    - the use of vehicle covers;
    - the use of wetting of the transported material;

- the use of appropriate freeboard;
- the method for the stabilization of storage piles and disturbed areas;
- the use of windbreaks at appropriate locations;
- the suspension of all earth moving activities under windy conditions; and,
- the use of on-site monitoring devices.

Verification: The CMM shall submit the Fugitive Dust Mitigation Plan to the CPM for approval at least 30 days prior to site mobilization.

AQ-C3: The CMM shall prepare and submit a Diesel Construction Equipment Mitigation Plan that will specifically identify diesel engine mitigation measures that will be employed during the construction phase of the main and related linear construction sites. The CMM will be responsible for implementing and maintaining all measures identified in the Diesel Construction Equipment Mitigation Plan. The Diesel Construction Equipment Mitigation Plan will address the following mitigation measures:

- the use of catalyzed diesel particulate filters (CDPF);
- the use of CARB certified ultra low sulfur diesel fuel, containing 15ppm sulfur or less (ULSD);
- the use of diesel engines certified to meet EPA and/or CARB 1996 or better off-road equipment emission standards; and
- the practice of restricting diesel engine idle time, to the extent practical, to no more than 10 minutes.

The Diesel Construction Equipment Mitigation Plan must include the following:

1. A list of all diesel-fueled, off-road, stationary or portable construction-related equipment to be used either on the main or the related linear construction sites. This list will be initially estimated and then subsequently updated, as specific contractors become available. Prior to a contractor gaining access to the main or related linear construction sites, the CMM will submit to the CPM for approval, an update of this list with regard to that contractor's diesel construction equipment.

2. Each piece of construction equipment listed under item (1) must demonstrate compliance by the following mitigation requirements with the exceptions described in items (3), (4) and (5):

Engine Size (BHP)	1996 CARB or EPA Certified Engine	Required Mitigation
< 100	NA	ULSD
> or = 100	Yes	ULSD
> or = 100	No	ULSD and CDPF, if suitable as determined by the CMM

3. If the construction equipment is intended to be on-site for 10 days or less, then no mitigation measures identified in item (2) are required.

4. The CPM may grant relief from the mitigation measures listed under item (2) for a specific piece of equipment if the CMM can demonstrate that they have made a good faith effort to comply with said mitigation measures and that compliance is otherwise not possible.

5. Any implemented mitigation measure in item (2) may be terminated immediately if one of the following conditions exists, however the CPM must be informed within 10 working days of the termination:

    a) The measure is excessively reducing normal availability of the construction equipment due to increased downtime for maintenance, and/or power output due to an excessive increase in back pressure.

    b) The measure is causing or is reasonably expected to cause significant engine damage.

    c) The measure is causing or is reasonably expected to cause a significant risk to nearby workers or the public.

    d) Any other seriously detrimental cause which has approval by the CPM prior to the termination being implemented.

    e) All contractors must agree to limit diesel engine idle time on all diesel-powered equipment, to the extent practical, to no more than 10 minutes.

Verification: The CMM shall submit the initial Diesel Construction Equipment Mitigation Plan to the CPM for approval at least 30 days prior to site mobilization. The CMM will update the initial Diesel Construction Equipment Mitigation Plan as necessary, no less than 10 days prior to a specific contractor gaining access to either the main or related linear construction sites. The CMM will notify the CPM of any emergency termination within 10 working days of the termination**.**

AQ-C4: The CMM will submit to the CPM for approval, the Monthly Construction Compliance Report that will summarize all compliance actions taken germane to Conditions of Certification AQ-C2 and AQ-C3. The Monthly Construction Compliance Report will include the following elements:

Fugitive Dust Mitigation Monthly Report (see Condition of Certification AQ-C2)

- Identification of each mitigation measure approved by the CPM.
- Identification of specific mitigation measure performed, the location performed, date performed and date enforced or verified as remaining effective.
- Identification of any transgressions or circumventions of mitigation measure and the actions taken to correct the situation.
- Identification of any observation by the CMM of dust plumes beyond the property boundary of the main construction site or beyond an acceptable distance from the linear construction site and what actions (if any) where taken to abate the plume.

Diesel Construction Equipment Mitigation Monthly Report (see Condition of Certification AQ-C3)

- Identification of any changes, as approved by the CPM, to the Diesel Construction Equipment Mitigation Plan from the initial report or the last monthly report including any new contractors and their diesel construction equipment.
- A copy of all receipt or other documentation indicating type and amount of fuel purchased, from whom, where delivered and on what date for the main and related linear construction sites.
- Identification and verification of all diesel engines required to meet EPA or CARB 1996 off-road diesel equipment emission standards.
- The identification of any suitability report being initiated, pursued or the completed report should be included the monthly report (in the month that it was completed) as should the verification of any subsequent installation of a catalyzed diesel particulate filter. The suitability of the use of a catalyzed diesel particulate filter for a specific piece of construction equipment is to be determined by a qualified mechanic or engineer who must submit a report through the CMM to the CPM for approval.
- Identification of any observation by the CMM of dark plumes emanating from diesel-fired construction equipment that extend beyond the property boundary of the main construction site or beyond an acceptable distance from the linear construction site and what actions (if any) where taken to abate the plume or future expected plumes.

Verification: CMM shall submit to the CPM for approval, the Monthly Construction Compliance Report by the 10th day of each month while construction is occurring at the main or related linear construction sites.

CONDITIONS OF CERTIFICATION AQ-1 THROUGH AQ-27, PERTAIN TO THE FOLLOWING EQUIPMENT:

1. 1,896 MMBTU/HR Gas Turbine (ID No. D46) (A/N 378766) No. 5 GE Model 7241FA with Dry Low NOx combustors and steam injection for power augmentation connected directly to a 179 MW (nominal) Electric Generator (ID No. B47) and a Heat Recovery Steam Generator (ID No. B49) with 600 MMBTU/HR Duct Burners (ID No. D48) connected in common with Gas Turbine No. 7 to a 288 MW (nominal) steam turbine (ID No. B50). Selective Catalytic Reduction (ID No. C52) (A/N 378771) with 4379 cubic feet of total volume 3 feet height, 44 feet long, 41 feet wide with an ammonia injection grid (ID No. B53) and a CO oxidation catalyst (ID No. C51) with 1000 cubic feet of total volume connected to an exhaust stack (ID No. S54) (A/N 378771) No 5.

2. 1,896 MMBTU/HR Gas Turbine (ID No. D55) (A/N 378767) No. 7 GE Model 7241FA with Dry Low NOx combustors and steam injection for power augmentation connected directly to a 179 MW (nominal) Electric Generator (ID No. B56) and a Heat Recovery Steam Generator (ID No. B58) with 600 MMBTU/HR Duct Burners (ID No. D57) connected in common with Gas Turbine No. 5 to a 288 MW (nominal) steam turbine (ID No. B59). Selective Catalytic Reduction (ID No. C61) (A/N

378773) with 4379 cubic feet of total volume 3 feet height, 44 feet long, 41 feet wide with an ammonia injection grid (ID No. B62) and a CO oxidation catalyst (ID No. C60) with 1000 cubic feet of total volume connected to an exhaust stack (ID No. S63) (A/N 378773) No 7.

AQ-1: Deleted

AQ-2: The operator shall install and maintain a flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia (NH3) to the SCR in combined cycle turbines 5 and 7. The operator shall also install and maintain a device to continuously record the parameter being measured. The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months.

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB), the United States Environmental Protection Agency (EPA) and the California Energy Commission (Commission).

AQ-3: The operator shall install and maintain a temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor in combined cycle turbines 5 and 7. The operator shall also install and maintain a device to continuously record the parameter being measured. The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months.

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB), the United States Environmental Protection Agency (EPA) and the California Energy Commission (Commission).

AQ-4: The operator shall install and maintain a pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches water column in combine cycle turbines 5 and 7. The operator shall also install and maintain a device to continuously record the parameter being measured. The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months.

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB), the United States Environmental Protection Agency (EPA) and the California Energy Commission (Commission).

AQ-5: The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutants To be Tested	Test Method	Averaging Time	Test Location
NH3 Emissions	District Method 207.1 and 5.3 or EPA Method 17	1 hour	Outlet of SCR serving this equipment

The test shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter. The NOx concentration, as determined by the CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60 minute averaging time period.

Verification: The project owner shall submit the proposed protocol for the source tests 60 days prior to the proposed source test date to both the District and CPM for approval. The project owner shall notify the District and CPM no later than 7 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 45 days following the source test date to both the District and CPM.

AQ-6: The operator shall conduct source test(s) for the pollutant(s) identified below on combined-cycle turbine units 5 and 7.

Pollutants To be Tested	Required Test Method	Averaging Time	Test Location
NOx Emissions	District Method 100.1	1 hour	Outlet of SCR serving this equipment
CO Emissions	District Method 100.1	1 hour	Outlet of SCR serving this equipment
SOx Emissions	**Approved District & CPM Method**	1 hour	Outlet of SCR serving this equipment
ROG Emissions	Approved District Method	1 hour	Outlet of SCR serving this equipment
PM Emissions	**Approved District & CPM Method**		Outlet of SCR serving this equipment
NH3 Emissions	District Method 207.1 and 5.3 or EPA Method 17	1 hour	Outlet of SCR serving this equipment

The test shall be conducted after District and CPM approval of the source test protocol, but no later than 180 days after initial start-up.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (CFH), the flue gas flow rate, and the turbine and steam turbine generating output in MW.

The test shall be conducted in accordance with a District and CPM approved source test protocol. The protocol shall be approved by the District and CEC before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of District Rule 304, and a description of all sampling and analytical procedures.

The test shall be conducted **with and without duct firing,** when this equipment is operating at loads of 100, 75, and 50 percent of maximum load.

Verification: The project owner shall submit the proposed protocol for the initial source tests 45 days prior to the proposed source test date to both the District and CPM for approval. The project owner shall submit source test results no later than 60 days following the source test date to both the District and CPM. The project owner shall notify the District and CPM no later than 10 days prior to the proposed initial source test date and time.

AQ-7: The operator shall conduct source test(s) for the pollutant(s) identified below on combine cycle turbine units 5 and 7.

Pollutants to be Tested	Required Test Method	Averaging Time	Test Location
SOx Emissions	**Approved District & CPM Method**	1 hour	Outlet of SCR serving this equipment
ROG Emissions	Approved District Method	1 hour	Outlet of SCR serving this equipment
PM Emissions	**Approved District & CPM Method**		Outlet of SCR serving this equipment

Verification: The project owner shall submit the proposed protocol for the source tests 60 days prior to the proposed source test date to both the District and CPM for approval. The project owner shall notify the District and CPM no later than 7 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 45 days following the source test date to both the District and CPM.

AQ-8: The operator shall provide to the District and CPM any source test report in accordance with the following specifications:

Source test results shall be submitted to the District and CPM no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv), corrected to 15 percent oxygen (dry basis), mass rate (lbs/hr), and lbs/MM cubic feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, the fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted.

Verification: See verifications for **AQ-5, -6,** and **–7.**

AQ-9: The project owner shall submit to the Commission, Quarterly Operational Reports that include the fuel use associated with each gas turbine train (both gas turbine and duct burner), in addition to the CO and NOx CEMS recorded data for each gas turbine exhaust stack on an hourly basis in order to verify the following emissions limits.

Except during startup, shutdown and initial commissioning, emissions from each gas turbine exhaust stack shall not exceed the following limits:

NOx (measured as NO2):	2.5 ppm at 15% oxygen on a dry basis averaged over one hour and 18.27 lbs/hour.
CO:	6 ppm at 15% oxygen on a dry basis averaged over 1 hour and 11.12 lbs/hr.
SOx (measured as SO2):	1.76 lbs/hr
VOC:	6.37 lbs/hr
PM10:	15.0 lbs/hr
Ammonia:	5 ppm at 15% oxygen on a dry basis.

Verification: The project owner shall submit the Quarterly Operational Reports as specified herein to the CPM no later than 30 days following the end of each calendar quarter.

AQ-10: The operator shall vent the combined cycle turbine units 5 and 7, as well as their associated duct burners to the CO oxidation and SCR control whenever this equipment is in operation.

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB), the United States Environmental Protection Agency (EPA) and the California Energy Commission (Commission).

AQ-11: The operator shall limit emissions from this equipment as follows:

Contaminant	Emissions Limit
CO	20,566 LBS IN ANY 1 MONTH
PM10	20,336 LBS IN ANY 1 MONTH
VOC	7,588 LBS IN ANY 1 MONTH
Sox	2,342 LBS IN ANY 1 MONTH

The operator shall calculate the emission limit(s) by using monthly fuel use data and the following emission factors: PM10 6.26 lbs/MMscf , VOC 2.39 lbs/MMscf, and SOx 0.72 lbs/mmscf. Written records of startups shall be maintained and made available to the District.

The operator shall calculate the emission limit(s) for CO, during the commissioning period using fuel use data and the following emissions factors: 501 lbs/MMscf during the full speed no load tests and the part load tests when the turbine is operating at or below 60 percent load, and 14 lbs/MMscf during the full load tests when the turbine is operating above 60 per cent load.

The operator shall calculate the emission limit(s) for CO, after the commissioning period and prior to the CO CEMS certification, using fuel use data and the following emission factors: 100 lbs per startup and 4.55 lbs/MMscf for all other operations.

The operator shall calculate the emission limit(s) for CO, after the CO CEMS certification, based on readings from the certified CEMS. In the event the CO CEMS is not operating or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated in accordance with the approved CEMS plan.

For the purposes of this condition, the limit(s) shall be based on the total combined emissions from combined cycle gas turbine No. 5 and No. 7.

Verification: The project owner shall submit the monthly fuel use data and emission calculations to the CPM in the Quarterly Operation Reports (**AQ-9**).

AQ-12: The operator shall keep records, in a manner approved by the District, for natural gas fuel use during the commissioning period.

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB), the United States Environmental Protection Agency (EPA) and the California Energy Commission (Commission).

AQ-13: The operator may, at his discretion, chose not to use ammonia injection if the following requirement is met:

The inlet exhaust temperature to the SCR is 450 degrees F or less, not to exceed 3 hours during a cold startup, 2 hours during a warm startup, and 1 hour during a hot startup.

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB), the United States Environmental Protection Agency (EPA) and the California Energy Commission (Commission).

AQ-14: The operator shall install and maintain a CEMS to measure CO concentration in ppmv. Concentrations shall be corrected to 15 percent oxygen on a dry basis. The CEMS will convert the actual CO concentrations to mass emission rates (lbs/hr) and record the hourly emission rates on a continuous basis. The CEMS shall be installed and operated, in accordance with an approved District Rule 218 CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval from District. The CO CEMS shall be installed and operated within 90 days after the initial start-up (first firing) of the gas turbines. The CEMS shall be installed and operated to measure CO concentration over a 15 minute averaging time period.

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB), the United States Environmental Protection Agency (EPA) and the California Energy Commission (Commission).

AQ-15: The operator shall install and maintain a CEMS to measure NOx concentration in ppmv. Concentrations shall be corrected to 15 percent oxygen on a dry basis. The CEMS shall be installed and operating no later than 12 months after initial start-up of the turbine and shall comply with the requirements of Rule 2012. During the interim period between the initial start-up and the provisional certification date of the CEMS, the operator shall comply with the monitoring requirements of Rule 2012(h)(2) and 2012(h)(3). Within two weeks of the turbine startup date, the operator shall provide written notification to the District of the exact date of start-up.

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB), the United States Environmental Protection Agency (EPA) and the California Energy Commission (Commission).

AQ-16: The 2.5 PPM NOx emission limit(s) shall not apply during turbine commissioning and startup periods. Startup time shall not exceed 3 hours per day. The commissioning period shall not exceed 33 operating days from the date of initial start-up. The operator shall provide the AQMD with written notification of the start-up date. No more than one turbine shall be in start-up mode at any one time. Written records of commissioning and start-ups shall be maintained and made available upon request from AQMD.

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB), the United States Environmental Protection Agency (EPA) and the California Energy Commission (Commission).

AQ-17: The 6 PPM CO emission limit(s) shall not apply during turbine commissioning and startup periods. Startup time shall not exceed 3 hours per day. The commissioning period shall not exceed 33 operating days from the date of initial start-up. The operator shall provide the AQMD with written notification of the initial start-up date. No more than one turbine shall be in start-up mode at any one time. Written records of commissioning and start-ups shall be maintained and made available upon request from AQMD.

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB), the United States Environmental Protection Agency (EPA) and the California Energy Commission (Commission).

AQ-18: The 109 LBS/MMCF NOx emission limit(s) shall only apply during the turbine commissioning period during the full speed no load tests and the part load tests when the turbine is operating at or below 60% load to report RECLAIM emissions.

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB), the United States Environmental Protection Agency (EPA) and the California Energy Commission (Commission).

AQ-19: The 33.9 LBS/MMCF NOx emission limit(s) shall only apply during the turbine commissioning period during the full load tests when the turbine is operating above 60% load to report RECLAIM emissions. This emission limit shall also apply during the interim reporting period to report RECLAIM emissions. The interim reporting period shall not exceed 12 months from the initial startup date.

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB), the United States Environmental Protection Agency (EPA) and the California Energy Commission (Commission).

AQ-20: The **80** lbs/hour NOx emission limit(s) shall only apply during turbine startups. Only one turbine shall be in startup mode at any one time. Startups shall not exceed 3 hours per day **per turbine**.

Verification: The project owner shall submit CEMS records demonstrating compliance with this condition as part of the Quarterly Operational Report required in **AQ-9.**

AQ-21: The 102 LBS/MMCF NOx emission limit(s) shall only apply to report RECLAIM emissions during the interim period for the duct burner. The interim reporting period shall not exceed 12 months from the initial start-up date.

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB), the United States Environmental Protection Agency (EPA) and the California Energy Commission (Commission).

AQ-22: For the purpose of the following condition numbers, the phrase "continuously record" shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

Condition no. **AQ-2**
Condition no. **AQ-3**
Condition no. **AQ-24**

Verification: See verifications for **AQ-2, -3,** and **–24.**

AQ-23: For the purpose of the condition number **AQ-4**, the phrase "continuously record" shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that month.

Verification: See verifications for **AQ-4.**

AQ-24 The 2.5 PPMV NOx emission limit(s) are averaged over 60 minutes at 15 percent oxygen, dry.

Verification: The project owner shall submit CEMS records demonstrating compliance with this condition as part of the Quarterly Operational Report required in **AQ-9.**

AQ-25 The 6 PPMV CO emission limit(s) are averaged over 60 minutes at 15 percent oxygen, dry.

Verification: The project owner shall submit CEMS records demonstrating compliance with this condition as part of the Quarterly Operational Report required in **AQ-9.**

AQ-26 The 5 PPMV NH3 emissions limit(s) are averaged over 60 minutes at 3 percent O2, dry. The operator shall calculate and continuously record the NH3 slip concentration using the following:

NH3 (ppmv) = [a-(b*c/1000000)]*1000000/b, where
a = ammonia injection rate (lb/hr)/17 (lbs/lb-mole)
b = dry exhaust gas flow rate (lb/hr)/29 (lbs/lb-mole)
c = change in measured NOx across the SCR (ppmv, dry basis)

The operator shall install and maintain a NOx analyzer, or other method as approved by the District, to measure the SCR inlet NOx ppm accurate to within +/- 5 percent calibrated at least every 12 months.

Verification: The project owner shall submit CEMS records and all calculations demonstrating compliance with this condition as part of the Quarterly Operational Report required in **AQ-9.**

AQ-27 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

Verification: The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District in each Quarterly Operational Report (see **AQ-9**).

Condition of Certification AQ-28, below, pertains to the following equipment:

Internal combustion engine, emergency fire pump, diesel Clarke, Model JDFP 06WA, turbocharged, aftercooled, 265 BHP A/N 378769 (ID. No. D45).

AQ-28 The operator shall limit the operating time to no more than 199 hours in any one year.

- To comply with this condition, the operator shall install and maintain a non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.
- The operator shall maintain records in a manner approved by the District to demonstrate compliance with this condition.
- The records shall include, date of operation, the elapsed time in hours, and the reason for operation. Records shall be kept and maintained on file for a minimum of 5 years and made available to AQMD upon request.

Verification: The project owner shall submit the recorded data specified in this condition on an annual basis as part of the fourth Quarter Operational Report (see **AQ-8**).

Conditions of Certification AQ-29 and AQ-30, below, pertain to the following equipment:
Underground Aqueous Ammonia Storage Tank, TK-001, carbon steel, double walled with three transfer pumps and a PVR set at 50 PSIG, 20000 gallons capacity. A/N 379904 (ID. No. D30)

AQ-29 The operator shall install and maintain a pressure relief valve set at 50 psig.

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB, EPA and the Commission.

AQ-30 The operator shall upon completion of construction, operate and maintain this equipment according to the following specifications:

In compliance with all mitigation measures as stipulated by the "Statement of Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan" and final subsequent Environmental Impact Report dated January, 1994 (SCH No. 88032315) for the El Segundo Generating Station ammonia storage and selective catalytic reduction project.

Verification: The project owner shall submit the "Statement of Findings, Statement of Overriding Considerations and Mitigation Monitoring Plan" and the final subsequent Environmental Impact Report dated, 1994 (SCH No. 88032315) to the CPM in a timely manner.

CULTURAL RESOURCES

CUL-1 Prior to the start of ground disturbance, the project owner shall submit the resume of the proposed Cultural Resources Specialist (CRS), and one alternate CRS, if an alternate is proposed, to the CPM for review and approval. The CRS will be responsible for implementation of all cultural resources conditions of certification. and may obtain qualified cultural resource monitors (CRMs) to monitor as necessary on the project.

The resume for the CRS and alternate, shall include information that demonstrates that the minimum qualifications specified in the U.S. Secretary of Interior Guidelines, as published by the CFR 36, CFR Part 61 are met. In addition, the CRS shall have the following qualifications:

a. The technical specialty of the CRS shall be appropriate to the needs of the project and shall include, a background in anthropology, archaeology, history, architectural history or a related field;

b. At least three years of archaeological or historic, as appropriate, resource mitigation and field experience in California; and

The resume shall include the names and phone numbers of contacts familiar with the work of the CRS on referenced projects and demonstrate that the CRS has the appropriate education and experience to accomplish the cultural resource tasks that must be addressed during ground disturbance, grading, construction and operation. In lieu of the above requirements, the resume shall demonstrate to the satisfaction of the CPM, that the proposed CRS or alternate has the appropriate training and background to effectively implement the conditions of certification.

CRMs shall meet the following qualifications:

a. A BS or BA degree in anthropology, archaeology, historic archaeology or a related field and one year experience monitoring in California; or

b. An AS or AA in anthropology, archaeology, historic archaeology or a related field and four years experience monitoring in California; or

c. Enrollment in upper division classes pursuing a degree in the fields of anthropology, archaeology, historic archaeology or a related field and two years of monitoring experience in California.

The project owner shall ensure that the CRS completes any monitoring, mitigation and curation activities necessary; fulfills all the requirements of these conditions of certification; ensures that the CRS obtains technical specialists, and CRMs, if needed; and that the CRS evaluates any cultural resources that are newly discovered or that may be affected in an unanticipated manner for eligibility to the California Register of Historic Resources (CRHR).

Verification:

1. The project owner shall submit the resume for the CRS at least 45 days prior to the start of ground disturbance.

2. At least 10 days prior to a termination or release of the CRS, the project owner shall submit the resume of the proposed new CRS.

3. At least 20 days prior to ground disturbance, the CRS shall submit written notification identifying anticipated CRMs for the project stating they meet the minimum qualifications required by this condition. If additional CRMs are needed later, the CRS shall submit written notice one week prior to any new CRMs beginning work.

CUL-2

1. Prior to the start of ground disturbance, the project owner shall provide the CRS and the CPM with maps and drawings showing the footprint of the power plant and all linear facilities. Maps will include the appropriate USGS quadrangles and a map at an appropriate scale (e.g., 1:2000 or 1" = 200') for plotting individual artifacts. If the CRS requests enlargements or strip maps for linear facility routes, the project owner shall provide copies to the CRS and CPM.
2. If the footprint of the power plant or linear facilities changes, the project owner shall provide maps and drawings reflecting these changes, to the CRS and the CPM for approval. Maps shall identify all areas of the project where ground disturbance is anticipated.
3. If construction of the project will proceed in phases, maps and drawings, not previously submitted, shall be submitted prior to the start of each phase. Written notification identifying the proposed schedule of each project phase shall be provided to the CRS and CPM.
4. At a minimum, the CRS shall consult weekly with the project construction manager to confirm area(s) to be worked during the next week, until ground disturbance is completed.
5. The project owner shall notify the CRS and CPM of any changes to the scheduling of the construction phases.

Verification:

1. The project owner shall submit the subject maps and drawings at least 40 days prior to the start of ground disturbance.

2. If there are changes to any project related footprint, revised maps and drawings shall be provided at least 15 days prior to start of ground disturbance for those changes.

3. If project construction is phased, the project owner shall submit the subject maps and drawings 15 days prior to each phase.

4. A current schedule of anticipated project activity shall be provided to the CRS on a weekly basis during ground disturbance and also provided in each Monthly Compliance Report (MCR).

The project owner shall provide written notice of any changes to scheduling of construction phases within 5 days of identifying the changes. A copy of the current schedule of anticipated project activities shall be submitted in each MCR.

CUL- 3 Prior to the start of ground disturbance, the project owner shall submit the Cultural Resources Monitoring and Mitigation Plan (CRMMP), as prepared by the CRS, to the CPM for approval. The CRMMP shall identify general and specific measures to minimize potential impacts to sensitive cultural resources. Copies of the CRMMP shall reside with the CRS, alternate CRS, each monitor, and the project owner's on-site manager. No ground disturbance shall occur prior to CPM approval of the CRMMP, unless specifically approved by the CPM.

The CRMMP shall include, but not be limited to, the following elements and measures.

1. The following statement shall be added to the Introduction: Any discussion, summary, or paraphrasing of the conditions in this CRMMP is intended as general guidance and as an aid to the user in understanding the conditions and their implementation. If there appears to be a discrepancy between the conditions and the way in which they have been summarized described, or interpreted in the CRMMP, the conditions, as written in the Final Decision, supercede any interpretation of the Conditions in the CRMMP. The cultural resources conditions of certification are attached as an appendix to this CRMMP.
2. A proposed general research design that includes a discussion of research questions and testable hypotheses applicable to the project area. A refined research design will be prepared for any resource where data recovery is required.
3. Specification of the implementation sequence and the estimated time frames needed to accomplish all project-related tasks during ground disturbance, construction, and post-construction analysis phases of the project.
4. Identification of the person(s) expected to perform each of the tasks, their responsibilities; and the reporting relationships between project construction management and the mitigation and monitoring team.
5. A discussion of the inclusion of Native American observers or monitors, the procedures to be used to select them, and their role and responsibilities.
6. A discussion of all avoidance measures such as flagging or fencing, to prohibit or otherwise restrict access to sensitive resource areas that are to be avoided during construction and/or operation, and identification of areas where these measures are to be implemented. The discussion shall address how these measures will be implemented prior to the start of construction

and how long they will be needed to protect the resources from project-related effects.

7. A discussion of the requirement that all cultural resources encountered will be recorded on a DPR form 523 and mapped (may include photos). In addition, all archaeological materials collected as a result of the archaeological investigations (survey, testing, data recovery) shall be curated in accordance with The State Historical Resources Commission's "Guidelines for the Curation of Archaeological Collections," into a retrievable storage collection in a public repository or museum. The public repository or museum must meet the standards and requirements for the curation of cultural resources set forth at Title 36 of the Federal Code of Regulations, Part 79.
8. A discussion of any requirements, specifications, or funding needed for curation of the materials to be delivered for curation and how requirements, specifications and funding will be met. The name and phone number of the contact person at the institution. Include a statement in the discussion of requirements that the project owner will pay all curation fees and that any agreements concerning curation will be retained and available for audit for the life of the project.
9. A discussion of the availability and the designated specialist's access to equipment and supplies necessary for site mapping, photographing, and recovering any cultural resource materials encountered during construction.
10. A discussion of the proposed Cultural Resource Report (CRR) which shall be prepared according to Archaeological Resource Management Report (ARMR) Guidelines.

Verification: The project owner shall submit the subject CRMMP at least 30 days prior to the start of ground disturbance. Per ARMR Guidelines the author's name shall appear on the title page of the CRMMP. Ground disturbance activities may not commence until the CRMMP is approved. At least 30 days prior to ground disturbance, a letter shall be provided to the CPM indicating that the project owner will pay curation fees for any materials collected as a result of the archaeological investigations (survey, testing, data recovery).

CUL-4 The project owner shall submit the Cultural Resources Report (CRR) to the CPM for approval. The CRR shall report on all field activities including dates, times and locations, findings, samplings and analysis. All survey reports, DPR 523 forms and additional research reports not previously submitted to the California Historic Resource Information System (CHRIS) shall be included as an appendix to the CRR.

Verification: The project owner shall submit the subject CRR within 90 days after completion of ground disturbance (including landscaping). Within 10 days after CPM approval, the project owner shall provide documentation to the CPM that copies of the CRR have been provided to the curating institution (if archaeological materials were collected), the State Historic Preservation Officer (SHPO) and the CHRIS.

CUL-5 Worker Environmental Awareness Program (WEAP) shall be provided, on a weekly basis, to all new employees starting prior to and for the duration of,

ground disturbance. The training may be presented in the form of a video. The training shall include:

1. A discussion of applicable laws and penalties under the law;
2. Samples or visuals of artifacts that might be found in the project vicinity;
3. Information that the CRS, alternate CRS, and CRMs have the authority to halt construction to the degree necessary, as determined by the CRS, in the event of a discovery or unanticipated impact to a cultural resource;
4. Instruction that employees are to halt work on their own in the vicinity of a potential cultural resources find, and shall contact their supervisor and the CRS or CRM; redirection of work will be determined by the construction supervisor and the CRS.
5. An informational brochure that identifies reporting procedures in the event of a discovery;
6. An acknowledgement form signed by each worker indicating that they have received the training; and
7. A sticker that shall be placed on hard hats indicating that environmental training has been completed.

Verification: The project owner shall provide in the Monthly Compliance Report the WEAP Certification of Completion form of persons who have completed the training in the prior month and a running total of all persons who have completed training to date.

CUL-6

1. The CRS, alternate CRS, or monitors shall monitor ground disturbance full time in the vicinity of the project site, linears and ground disturbance at laydown areas or other ancillary areas to ensure there are no impacts to undiscovered resources and to ensure that known resources are not impacted in an unanticipated manner. In the event that the CRS determines that full-time monitoring is not necessary in certain locations, a letter or email providing a detailed justification for the decision to reduce the level of monitoring shall be provided to the CPM for review and approval prior to any reduction in monitoring.
2. CRMs shall keep a daily log of any monitoring or cultural resource activities and the CRS shall prepare a weekly summary report on the progress or status of cultural resources-related activities. The CRS may informally discuss cultural resource monitoring and mitigation activities with Energy Commission technical staff.
3. The CRS shall notify the project owner and the CPM, by telephone or e-mail, of any incidents of non-compliance with any cultural resources conditions of certification within 24hrs. of becoming aware of the situation. The CRS shall also recommend corrective action to resolve the problem or achieve compliance with the conditions of certification.
4. Cultural resources monitoring activities are the responsibility of the CRS. Any interference with monitoring activities, removal of a monitor from duties

assigned by the CRS or direction to a monitor to relocate monitoring activities by anyone other than the CRS shall be considered non-compliance with these conditions of certification.

5. A Native American monitor shall be obtained, to monitor ground disturbance in areas where Native American artifacts may be discovered. Informational lists of concerned Native Americans and Guidelines for monitoring shall be obtained from the Native American Heritage Commission. Preference in selecting a monitor shall be given to Native Americans with traditional ties to the area that will be monitored.

Verification:

1. During the ground disturbance phases of the project, if the CRS wishes to reduce the level of monitoring occurring at the project, a letter identifying the area(s) where the CRS recommends the reduction and justifying the reductions in monitoring shall be submitted to the CPM for review and approval.

2. During the ground disturbance phases of the project, the project owner shall include in the MCR to the CPM copies of the weekly summary reports prepared by the CRS regarding project-related cultural resources monitoring. Copies of daily logs shall be retained on-site and made available for audit by the CPM.

3. Within 24 hours of recognition of a non-compliance issue, the CRS shall notify the CPM by telephone of the problem and of steps being taken to resolve the problem. The telephone call shall be followed by an e-mail or fax detailing the non-compliance issue and the measures necessary to achieve resolution of the issue. Daily logs shall include forms detailing any instances of non-compliance with conditions of certification. In the event of a non-compliance issue, a report written no sooner than two weeks after resolution of the issue that describes the issue, resolution of the issue and the effectiveness or the resolution measures, shall be provided in the next MCR.

4. One week prior to ground disturbance in areas where there is a potential to discover Native American artifacts, the project owner shall send notification to the CPM identifying the person(s) retained to conduct Native American monitoring. If efforts to obtain the services of a qualified Native American monitor are unsuccessful, the project owner shall immediately inform the CPM who will initiate a resolution process.

CUL-7 The CRS, alternate CRS and the CRMs shall have the authority to halt construction if previously unknown cultural resource sites or materials are encountered, or if known resources may be impacted in a previously unanticipated manner. Redirection of ground disturbance shall be accomplished under the direction of the construction supervisor.

If such resources are found or impacts can be anticipated, the halting or redirection of construction shall remain in effect until all of the following have occurred:

1. the CRS has notified the project owner, and the CPM has been notified within 24 hours of the find description and the work stoppage.;

2. The CRS, the project owner, and the CPM have conferred and determined what, if any, data recovery or other mitigation is needed;
3. Any necessary data recovery and mitigation has been completed

Verification: At least 30 days prior to the start of ground disturbance, the project owner shall provide the CPM with a letter confirming that the CRS, alternate CRS and CRMs have the authority to halt construction activities in the vicinity of a cultural resource find, and that the CRS or project owner will notify the CPM immediately (no later than the following morning of the incident or Monday morning in the case of a weekend) of any halt of construction activities, including the circumstance and proposed mitigation measures. The project owner shall provide the CRS with a copy of the letter granting the authority to halt.

CUL-8 Within the water pipeline study area, bordered by El Segundo Blvd., Loma Vista St., Grand Ave. and Eucalyptus St., the route for the water lines shall extend down Grand Avenue to Eucalyptus St. to El Segundo Blvd. (Applicant has conducted a cultural resources assessment in the pipeline study area and within the area defined as the proposed project). Apart from this route within the pipeline study area, if the water lines and associated pipelines are to be located anywhere but in an area originally defined as part of the proposed project, a cultural resource assessment shall be conducted prior to any ground disturbance. The cultural resource assessment shall consist of a records search and a pedestrian survey which gives equal emphasis to prehistoric and historic resources and an evaluation of significance. A Native American monitor from a group with historic ties to the affected area shall be retained as part of the cultural resources team during any surveys or subsurface investigation.

Verification: Forty days prior to the start of any ground disturbance or project site preparation at the newly identified location of the waterlines and associated pipelines, the project owner shall submit the following for approval by the CPM: (1) the results of the records search and the results of the survey; (2) an evaluation, including site records, of all cultural resources within or adjacent to the project Area of Potential Effects; and (3) the information shall also include the name and tribal affiliation of the Native American monitor.

FACILITY DESIGN

GEN-1: The project owner shall design, construct and inspect the project in accordance with the 1998 California Building Code (CBC) and all other applicable LORS in effect at the time initial design plans are submitted to the CBO for review and approval. (The CBC in effect is that edition that has been adopted by the California Building Standards Commission and published at least 180 days previously.) All transmission facilities (lines, switchyards, switching stations, and substations) are handled in Conditions of Certification in the **Transmission System Engineering** section of this document.

In the event that the initial engineering designs are submitted to the CBO when a successor to the 1998 CBC is in effect, the 1998 CBC provisions identified herein shall be replaced with the applicable successor provisions. Where, in any specific case, different sections of the code specify different materials, methods of construction, or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern.

Verification: Within 30 days after receipt of the Certificate of Occupancy, the project owner shall submit to the California Energy Commission Compliance Project Manager (CPM) a statement of verification, signed by the responsible design engineer, attesting that all designs, construction, installation and inspection requirements of the applicable LORS and the Energy Commission's Decision have been met in the area of facility design. The project owner shall provide the CPM a copy of the Certificate of Occupancy within 30 days of receipt from the CBO [1998 CBC, Section 109 – Certificate of Occupancy].

GEN-2: Prior to submittal of the initial engineering designs for CBO review, the project owner shall furnish to the CPM and to the CBO a schedule of facility design submittals, a Master Drawing List, and a Master Specifications List. The schedule shall contain a list of proposed submittal packages of designs, calculations, and specifications for major structures and equipment. To facilitate audits by Energy Commission staff, the project owner shall provide specific packages to the CPM when requested.

Verification: At least 60 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of rough grading, the project owner shall submit to the CBO and to the CPM the schedule, the Master Drawing List, and the Master Specifications List of documents to be submitted to the CBO for review and approval. These documents shall be the pertinent design documents for the major structures and equipment listed in Table 1 below. Major structures and equipment shall be added to or deleted from the Table only with CPM approval. The project owner shall provide schedule updates in the Monthly Compliance Report.

Table 1: Major Structures and Equipment List

Equipment/System	Quantity (Plant)
Combustion Turbine (CT) Foundation and Connections	2
HP/IP Steam Turbine (ST) Foundation and Connections	1
LP Steam Turbine (ST) Foundation and Connections	1
Combustion Turbine Generator Foundation and Connections	2
Steam Turbine Generator Foundation and Connections	1
Heat Recovery Steam Generator (HRSG) Structure, Foundation and Connections	2
Auxiliary Transformer Foundation and Connections	2
CT Inlet Air Plenum Structure, Foundation and Connections	2
Inlet Air Evaporative Cooler Structure, Foundation and Connections	2
HRSG Exhaust Stack, Foundation and Connections	2
Isolated Phase Bus Duct	2
HRSG Transition Duct from CTG — Structure	2
Secondary Unit Substation/Transformer	2
Electrical/Control Center	2
Condenser Structure, Foundation and Connections	1
Feed Water Pump Foundation and Connections	4
Condensate Pump Foundation and Connections	2
Feed Water Heater Foundation and Connections	2
Air Compressor Foundation and Connections	2
CT Water Injection Skid Foundation and Connections	2
CT Static Starter Skid Foundation and Connections	2
CT Mechanical Accessory Compartment Foundation and Connections	2
Switchgear Equipment Building Structure, Foundation and Connections	2
CT Generator Step-up Transformer Foundation and Connections	2
ST Generator Step-up Transformer Foundation and Connections	1
HRSG Blowdown Tank Foundation and Connections	2
Boiler Circulating Pump Connections	8
Condensate Circulating Pump Foundation and Connections	4
Fuel Gas Heater Foundation and Connections	2
ST Lube Oil Package Foundation and Connections	1
Drain Cooler Foundation and Connections	1
Air Receiver Foundation and Connections	1
Air Dryer Foundation and Connections	1
Closed Cycle Cooling Water Heat Exchanger Foundation and Connections	2

Equipment/System	Quantity (Plant)
Closed Cycle Cooling Water Pump Foundation and Connections	2
Potable Water Systems	1 Lot
Drainage Systems (including sanitary drain and waste)	1 Lot
Building Energy Conservation Systems	1 Lot
Temperature Control and Ventilation Systems (including water and sewer connections)	1 Lot
High Pressure Piping	1 Lot
HVAC and Refrigeration Systems	1 Lot

GEN-3: The project owner shall make payments to the CBO for design review, plan check and construction inspection based upon a reasonable fee schedule to be negotiated between the project owner and the CBO. These fees may be consistent with the fees listed in the 1998 CBC [Chapter 1, Section 107 and Table 1-A, Building Permit Fees; Appendix Chapter 33, Section 3310 and Table A-33-A, Grading Plan Review Fees; and Table A-33-B, Grading Permit Fees], adjusted for inflation and other appropriate adjustments; may be based on the value of the facilities reviewed; may be based on hourly rates; or may be as otherwise agreed by the project owner and the CBO.

Verification: The project owner shall make the required payments to the CBO in accordance with the agreement between the project owner and the CBO. The project owner shall send a copy of the CBO's receipt of payment to the CPM in the next Monthly Compliance Report indicating that the applicable fees have been paid.

GEN-4: Prior to the start of rough grading, the project owner shall assign a California registered architect, structural engineer or civil engineer, as a resident engineer (RE), to be in general responsible charge of the project [Building Standards Administrative Code (Cal. Code Regs., tit. 24, § 4-209, Designation of Responsibilities).] All transmission facilities (lines, switchyards, switching stations, and substations) are handled in Conditions of Certification in the **Transmission System Engineering** section of this document.

The RE may delegate responsibility for portions of the project to other registered engineers. Registered mechanical and electrical engineers may be delegated responsibility for mechanical and electrical portions of the project respectively. A project may be divided into parts, provided each part is clearly defined as a distinct unit. Separate assignment of general responsible charge may be made for each designated part.

The RE shall:

1. Monitor construction progress of work requiring CBO design review and inspection to ensure compliance with LORS;

2. Ensure that construction of all the facilities subject to CBO design review and inspection conforms in every material respect to the applicable LORS, these Conditions of Certification, approved plans, and specifications;

3. Prepare documents to initiate changes in the approved drawings and specifications when directed by the project owner or as required by conditions on the project;

4. Be responsible for providing the project inspectors and testing agency(ies) with complete and up-to-date set(s) of stamped drawings, plans, specifications and any other required documents;

5. Be responsible for the timely submittal of construction progress reports to the CBO from the project inspectors, the contractor, and other engineers who have been delegated responsibility for portions of the project; and

6. Be responsible for notifying the CBO of corrective action or the disposition of items noted on laboratory reports or other tests as not conforming to the approved plans and specifications.

The RE shall have the authority to halt construction and to require changes or remedial work, if the work does not conform to applicable requirements.

If the RE or the delegated engineers are reassigned or replaced, the project owner shall submit the name, qualifications and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer.

Verification: At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval, the name, qualifications and registration number of the RE and any other delegated engineers assigned to the project. The project owner shall notify the CPM of the CBO's approvals of the RE and other delegated engineer(s) within five days of the approval.

If the RE or the delegated engineer(s) are subsequently reassigned or replaced, the project owner has five days in which to submit the name, qualifications, and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.

GEN-5: Prior to the start of rough grading, the project owner shall assign at least one of each of the following California registered engineers to the project: A) a civil engineer; B) a geotechnical engineer or a civil engineer experienced and knowledgeable in the practice of soils engineering; C) a design engineer, who is either a structural engineer or a civil engineer fully competent and proficient in the design of power plant structures and equipment supports; D) a mechanical engineer; and E) an electrical engineer. [California Business and Professions Code section 6704 et seq., and sections 6730 and 6736 requires state registration to practice as a civil engineer or structural engineer in

California.] All transmission facilities (lines, switchyards, switching stations, and substations) are handled in Conditions of Certification in the **Transmission System Engineering** section of this document.

The tasks performed by the civil, mechanical, electrical or design engineers may be divided between two or more engineers, as long as each engineer is responsible for a particular segment of the project (e.g., proposed earthwork, civil structures, power plant structures, equipment support). No segment of the project shall have more than one responsible engineer. The transmission line may be the responsibility of a separate California registered electrical engineer.

The project owner shall submit to the CBO for review and approval, the names, qualifications and registration numbers of all responsible engineers assigned to the project [1998 CBC, Section 104.2, Powers and Duties of Building Official].

If any one of the designated responsible engineers is subsequently reassigned or replaced, the project owner shall submit the name, qualifications and registration number of the newly assigned responsible engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer.

A: The civil engineer shall:

1. Design, or be responsible for design, stamp, and sign all plans, calculations, and specifications for proposed site work, civil works, and related facilities requiring design review and inspection by the CBO. At a minimum, these include: grading, site preparation, excavation, compaction, construction of secondary containment, foundations, erosion and sedimentation control structures, drainage facilities, underground utilities, culverts, site access roads, and sanitary sewer systems; and
2. Provide consultation to the RE during the construction phase of the project, and recommend changes in the design of the civil works facilities and changes in the construction procedures.

B: The geotechnical engineer or civil engineer, experienced and knowledgeable in the practice of soils engineering, shall:

1. Review all the engineering geology reports, and prepare final soils grading report;
2. Prepare the soils engineering reports required by the 1998 CBC, Appendix Chapter 33, Section 3309.5 – Soils Engineering Report, and Section 3309.6 – Engineering Geology Report;
3. Be present, as required, during site grading and earthwork to provide consultation and monitor compliance with the requirements set forth in the 1998 CBC, Appendix Chapter 33, section 3317, Grading Inspections;
4. Recommend field changes to the civil engineer and RE;
5. Review the geotechnical report, field exploration report, laboratory tests, and engineering analyses detailing the nature and extent of the site soils

that may be susceptible to liquefaction, rapid settlement or collapse when saturated under load; and

6. Prepare reports on foundation investigation to comply with the 1998 CBC, Chapter 18 section 1804, Foundation Investigations.

This engineer shall be authorized to halt earthwork and to require changes; if site conditions are unsafe or do not conform with predicted conditions used as a basis for design of earthwork or foundations [1998 CBC, section 104.2.4, Stop orders].

C: The design engineer shall:

1. Be directly responsible for the design of the proposed structures and equipment supports;
2. Provide consultation to the RE during design and construction of the project;
3. Monitor construction progress to ensure compliance with LORS;
4. Evaluate and recommend necessary changes in design; and
5. Prepare and sign all major building plans, specifications and calculations.

D: The mechanical engineer shall be responsible for, and sign and stamp a statement with, each mechanical submittal to the CBO, stating that the proposed final design plans, specifications, and calculations conform with all of the mechanical engineering design requirements set forth in the Energy Commission's Decision.

E: The electrical engineer shall:

1. Be responsible for the electrical design of the project; and
2. Sign and stamp electrical design drawings, plans, specifications, and calculations.

Verification: At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval, the names, qualifications and registration numbers of all the responsible engineers assigned to the project. The project owner shall notify the CPM of the CBO's approvals of the engineers within five days of the approval.

If the designated responsible engineer is subsequently reassigned or replaced, the project owner has five days in which to submit the name, qualifications, and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.

GEN-6: Prior to the start of an activity requiring special inspection, the project owner shall assign to the project, qualified and certified special inspector(s) who shall be responsible for the special inspections required by the 1998 CBC, Chapter 17, Section 1701, Special Inspections, Section, 1701.5 Type of Work

(requiring special inspection), and Section 106.3.5, Inspection and observation program. All transmission facilities (lines, switchyards, switching stations, and substations) are handled in Conditions of Certification in the **Transmission System Engineering** section of this document.

The special inspector shall:

1. Be a qualified person who shall demonstrate competence, to the satisfaction of the CBO, for inspection of the particular type of construction requiring special or continuous inspection;

2. Observe the work assigned for conformance with the approved design drawings and specifications;

3. Furnish inspection reports to the CBO and RE. All discrepancies shall be brought to the immediate attention of the RE for correction, then, if uncorrected, to the CBO and the CPM for corrective action; and

4. Submit a final signed report to the RE, CBO, and CPM, stating whether the work requiring special inspection was, to the best of the inspector's knowledge, in conformance with the approved plans and specifications and the applicable provisions of the applicable edition of the CBC.

A certified weld inspector, certified by the American Welding Society (AWS), and/or American Society of Mechanical Engineers (ASME) as applicable, shall inspect welding performed on-site requiring special inspection (including structural, piping, tanks and pressure vessels).

Verification: At least 15 days prior to the start of an activity requiring special inspection, the project owner shall submit to the CBO for review and approval, with a copy to the CPM, the name(s) and qualifications of the certified weld inspector(s), or other certified special inspector(s) assigned to the project to perform one or more of the duties set forth above. The project owner shall also submit to the CPM a copy of the CBO's approval of the qualifications of all special inspectors in the next Monthly Compliance Report.

If the special inspector is subsequently reassigned or replaced, the project owner has five days in which to submit the name and qualifications of the newly assigned special inspector to the CBO for approval. The project owner shall notify the CPM of the CBO's approval of the newly assigned inspector within five days of the approval.

GEN-7: The project owner shall keep the CBO informed regarding the status of engineering and construction. If any discrepancy in design and/or construction is discovered in any work that has undergone CBO design review and approval, the project owner shall document the discrepancy and recommend the corrective action required. The discrepancy documentation shall be submitted to the CBO for review and approval. The discrepancy documentation shall reference this Condition of Certification and, if appropriate, the applicable sections of the CBC and/or other LORS.

Verification: The project owner shall transmit a copy of the CBO's approval of any corrective action taken to resolve a discrepancy to the CPM in the next Monthly Compliance Report. If any corrective action is disapproved, the project owner shall advise the CPM, within five days, of the reason for disapproval, and the revised corrective action to obtain CBO's approval.

GEN-8: The project owner shall obtain the CBO's final approval of all completed work that has undergone CBO design review and approval. The project owner shall request the CBO to inspect the completed structure and review the submitted documents. When the work and the "as-built" and "as graded" plans conform to the approved final plans, the project owner shall notify the CPM regarding the CBO's final approval. The marked up "as-built" drawings for the construction of structural and architectural work shall be submitted to the CBO. Changes approved by the CBO shall be identified on the "as-built" drawings [1998 CBC, Section 108, Inspections]. The project owner shall retain one set of approved engineering plans, specifications and calculations at the project site or at another accessible location during the operating life of the project [1998 CBC, Section 106.4.2, Retention of plans].

Verification: Within 15 days of the completion of any work, the project owner shall submit to the CBO, with a copy to the CPM in the next Monthly Compliance Report, (a) a written notice that the completed work is ready for final inspection, and (b) a signed statement that the work conforms to the final approved plans. After storing final approved engineering plans, specifications and calculations as described above, the project owner shall submit to the CPM a letter stating that the above documents have been stored and indicate the storage location of such documents.

GEN-9: The project owner shall file a closure/decommissioning plan with the County and the City for review and comment, and the CPM for review and approval, at least 12 months (or other time mutually agreed to by the project owner and the CPM) prior to commencing the closure activities. If the project is abandoned before construction is completed, the project owner shall return the site to its original condition.

The closure plan shall include a discussion of the following:

1. The proposed closure/decommissioning activities for the project and all appurtenant facilities constructed as part of the project;
2. All applicable LORS, all local/regional plans, and a discussion of the conformance of the proposed decommissioning activities to the applicable LORS and local/regional plans;
3. Activities necessary to restore the site if the ESPR decommissioning plan requires removal of all equipment and appurtenant facilities; and
4. Closure/decommissioning alternatives, other than complete restoration of the site.

Verification: At least 12 months (or other period of time mutually agreed to by the project owner and the CPM) prior to closure or decommissioning activities, the project owner shall file a copy of the closure/decommissioning plan with the County and the City for review and comment, and the CPM for review and approval. Prior to the

submittal of the closure plan, a meeting shall be held between the project owner and the CPM for discussing the specific contents of the plan.

CIVIL-1: Prior to the start of site grading, the project owner shall submit to the CBO for review and approval the following:

1. Design of the proposed drainage structures and the grading plan;
2. An erosion and sedimentation control plan;
3. Related calculations and specifications, signed and stamped by the responsible civil engineer; and
4. Soils report as required by the 1998 CBC [Appendix Chapter 33, Section 3309.5, Soils Engineering Report and Section 3309.6, Engineering Geology Report].

Verification: At least 15 days prior to the start of site grading (or a lesser number of days mutually agreed to by the project owner and the CBO), the project owner shall submit the documents described above to the CBO for design review and approval. In the next Monthly Compliance Report following the CBO's approval, the project owner shall submit a written statement certifying that the documents have been approved by the CBO.

CIVIL-2: The resident engineer shall, if appropriate, stop all earthworks and construction in the affected areas when the responsible geotechnical engineer or civil engineer experienced and knowledgeable in the practice of soils engineering identifies unforeseen adverse soil or geologic conditions. The project owner shall submit modified plans, specifications and calculations to the CBO based on these new conditions. The project owner shall obtain approval from the CBO before resuming earthwork and construction in the affected area [1998 CBC, Section 104.2.4, Stop orders].

Verification: The project owner shall notify the CPM, within five days, when earthwork and construction is stopped as a result of unforeseen adverse geologic/soil conditions. Within five days of the CBO's approval to resume earthwork and construction in the affected areas, the project owner shall provide to the CPM a copy of the CBO's approval.

CIVIL-3: The project owner shall perform inspections in accordance with the 1998 CBC, Chapter 1, Section 108, Inspections; Chapter 17, Section 1701.6, Continuous and Periodic Special Inspection; and Appendix Chapter 33, Section 3317, Grading Inspection. All plant site-grading operations for which a grading permit is required shall be subject to inspection by the CBO.

If, in the course of inspection, it is discovered that the work is not being performed in accordance with the approved plans, the discrepancies shall be reported immediately to the resident engineer, the CBO, and the CPM. The project owner shall prepare a written report detailing all discrepancies and non-compliance items, and the proposed corrective action, and send copies to the CBO and the CPM.

Verification: Within five days of the discovery of any discrepancies, the resident engineer shall transmit to the CBO and the CPM a Non-Conformance Report (NCR),

and the proposed corrective action. Within five days of resolution of the NCR, the project owner shall submit the details of the corrective action to the CBO and the CPM. A list of NCRs, for the reporting month, shall also be included in the following Monthly Compliance Report.

CIVIL-4: After completion of finished grading and erosion and sedimentation control and drainage facilities, the project owner shall obtain the CBO's approval of the final "as-graded" grading plans, and final "as-built" plans for the erosion and sedimentation control facilities [1998 CBC, Section 109, Certificate of Occupancy].

Verification: Within 30 days of the completion of the erosion and sediment control mitigation and drainage facilities, the project owner shall submit to the CBO the responsible civil engineer's signed statement that the installation of the facilities and all erosion control measures were completed in accordance with the final approved combined grading plans, and that the facilities are adequate for their intended purposes. The project owner shall submit a copy of this report to the CPM in the next Monthly Compliance Report.

STRUC-1: Prior to the start of any increment of construction of any major structure or component listed in **Table 1** of Condition of Certification **GEN-2**, above, the project owner shall submit to the CBO for design review and approval the proposed lateral force procedures for project structures and the applicable designs, plans and drawings for project structures. Proposed lateral force procedures, designs, plans and drawings shall be those for the following items (from **Table 1**, above):

1. Major project structures;
2. Major foundations, equipment supports and anchorage;
3. Large field fabricated tanks;
4. Turbine/generator pedestal; and
5. Switchyard structures.

Construction of any structure or component shall not commence until the CBO has approved the lateral force procedures to be employed in designing that structure or component.

The project owner shall:

1. Obtain approval from the CBO of lateral force procedures proposed for project structures;
2. Obtain approval from the CBO for the final design plans, specifications, calculations, soils reports, and applicable quality control procedures. If there are conflicting requirements, the more stringent shall govern (i.e., highest loads, or lowest allowable stresses shall govern). All plans, calculations, and specifications for foundations that support structures shall be filed concurrently with the structure plans, calculations, and specifications [1998 CBC, Section 108.4, Approval Required];

3. Submit to the CBO the required number of copies of the structural plans, specifications, calculations, and other required documents of the designated major structures at least 60 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of on-site fabrication and installation of each structure, equipment support, or foundation [1998 CBC, Section 106.4.2, Retention of plans and Section 106.3.2, Submittal documents]; and
4. Ensure that the final plans, calculations, and specifications clearly reflect the inclusion of approved criteria, assumptions, and methods used to develop the design. The final designs, plans, calculations and specifications shall be signed and stamped by the responsible design engineer [1998 CBC, Section 106.3.4, Architect or Engineer of Record].

Verification: At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of any increment of construction of any structure or component listed in Table 1 of Condition of Certification GEN-2, above the project owner shall submit to the CBO, with a copy to the CPM, the responsible design engineer's signed statement that the final design plans, specifications and calculations conform with all of the requirements set forth in the Energy Commission's Decision.

If the CBO discovers non-conformance with the stated requirements, the project owner shall resubmit the corrected plans to the CBO within 20 days of receipt of the nonconforming submittal with a copy of the transmittal letter to the CPM.
The project owner shall submit to the CPM a copy of a statement from the CBO that the proposed structural plans, specifications, and calculations have been approved and are in conformance with the requirements set forth in the applicable LORS.

STRUC-2: The project owner shall submit to the CBO the required number of sets of the following documents related to work that has undergone CBO design review and approval:

1. Concrete cylinder strength test reports (including date of testing, date sample taken, design concrete strength, tested cylinder strength, age of test, type and size of sample, location and quantity of concrete placement from which sample was taken, and mix design designation and parameters);
2. Concrete pour sign-off sheets;
3. Bolt torque inspection reports (including location of test, date, bolt size, and recorded torques);
4. Field weld inspection reports (including type of weld, location of weld, inspection of non-destructive testing (NDT) procedure and results, welder qualifications, certifications, qualified procedure description or number (ref: AWS); and
5. Reports covering other structural activities requiring special inspections shall be in accordance with the 1998 CBC, Chapter 17, Section 1701, Special Inspections, Section 1701.5, Type of Work (requiring special inspection), Section 1702, Structural Observation and Section 1703, Nondestructive Testing.

Verification: If a discrepancy is discovered in any of the above data, the project owner shall, within five days, prepare and submit an NCR describing the nature of the

discrepancies to the CBO, with a copy of the transmittal letter to the CPM. The NCR shall reference the Condition(s) of Certification and the applicable CBC chapter and section. Within five days of resolution of the NCR, the project owner shall submit a copy of the corrective action to the CBO and the CPM.

The project owner shall transmit a copy of the CBO's approval or disapproval of the corrective action to the CPM within 15 days. If disapproved, the project owner shall advise the CPM, within five days, the reason for disapproval, and the revised corrective action to obtain CBO's approval.

STRUC-3: The project owner shall submit to the CBO design changes to the final plans required by the 1998 CBC, Chapter 1, Section 106.3.2, Submittal documents, and Section 106.3.3, Information on plans and specifications, including the revised drawings, specifications, calculations, and a complete description of, and supporting rationale for, the proposed changes, and shall give the CBO prior notice of the intended filing.

Verification: On a schedule suitable to the CBO, the project owner shall notify the CBO of the intended filing of design changes, and shall submit the required number of sets of revised drawings and the required number of copies of the other above-mentioned documents to the CBO, with a copy of the transmittal letter to the CPM. The project owner shall notify the CPM, via the Monthly Compliance Report, when the CBO has approved the revised plans.

STRUC-4: Tanks and vessels containing quantities of toxic or hazardous materials exceeding amounts specified in Chapter 3, Table 3-E of the 1998 CBC shall, at a minimum, be designed to comply with Occupancy Category 2 of the 1998 CBC.

Verification: At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of installation of the tanks or vessels containing the above specified quantities of toxic or hazardous materials, the project owner shall submit to the CBO for design review and approval final design plans, specifications, and calculations, including a copy of the signed and stamped engineer's certification.

The project owner shall send copies of the CBO approvals of plan checks to the CPM in the following Monthly Compliance Report. The project owner shall also transmit a copy of the CBO's inspection approvals to the CPM in the Monthly Compliance Report following completion of any inspection.

MECH-1: Prior to the start of any increment of major piping or plumbing construction, the project owner shall submit, for CBO design review and approval, the proposed final design, specifications and calculations for each plant major piping and plumbing system listed in Table 1, Condition of Certification GEN 2, above. Physical layout drawings and drawings not related to code compliance and life safety need not be submitted. The submittal shall also include the applicable QA/QC procedures. Upon completion of construction of any such major piping or plumbing system, the project owner shall request the CBO's inspection approval of said construction [1998 CBC, Section 106.3.2, Submittal Documents, Section 108.3, Inspection Requests, Section 108.4, Approval Required; 1998 California Plumbing Code, Section 103.5.4, Inspection Request, Section 301.1.1, Approval].

The responsible mechanical engineer shall stamp and sign all plans, drawings and calculations for the major piping and plumbing systems subject to the CBO design review and approval, and submit a signed statement to the CBO when the said proposed piping and plumbing systems have been designed, fabricated and installed in accordance with all of the applicable laws, ordinances, regulations and industry standards [Section 106.3.4, Architect or Engineer of Record], which may include, but not be limited to:

American National Standards Institute (ANSI) B31.1 (Power Piping Code);
ANSI B31.2 (Fuel Gas Piping Code);
ANSI B31.3 (Chemical Plant and Petroleum Refinery Piping Code);
ANSI B31.8 (Gas Transmission and Distribution Piping Code);
Title 24, California Code of Regulations, Part 5 (California Plumbing Code);
Title 24, California Code of Regulations, Part 6 (California Energy Code, for building energy conservation systems and temperature control and ventilation systems);
Title 24, California Code of Regulations, Part 2 (California Building Code); and
Specific City/County code.

The CBO may deputize inspectors to carry out the functions of the code enforcement agency [1998 CBC, Section 104.2.2, Deputies].

Verification: At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of any increment of major piping or plumbing construction listed in Table 1, Condition of Certification GEN-2 above, the project owner shall submit to the CBO for design review and approval the final plans, specifications and calculations, including a copy of the signed and stamped statement from the responsible mechanical engineer certifying compliance with the applicable LORS, and shall send the CPM a copy of the transmittal letter in the next Monthly Compliance Report.

The project owner shall transmit to the CPM, in the Monthly Compliance Report following completion of any inspection, a copy of the transmittal letter conveying the CBO's inspection approvals.

MECH-2: For all pressure vessels installed in the plant, the project owner shall submit to the CBO and California Occupational Safety and Health Administration (Cal-OSHA), prior to operation, the code certification papers and other documents required by the applicable LORS. Upon completion of the installation of any pressure vessel, the project owner shall request the appropriate CBO and/or Cal-OSHA inspection of said installation [1998 CBC, Section 108.3 – Inspection Requests].

The project owner shall:

1. Ensure that all boilers and fired and unfired pressure vessels are designed, fabricated and installed in accordance with the appropriate section of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, or other applicable code. Vendor certification, with

identification of applicable code, shall be submitted for prefabricated vessels and tanks; and

2. Have the responsible design engineer submit a statement to the CBO that the proposed final design plans, specifications and calculations conform to all of the requirements set forth in the appropriate ASME Boiler and Pressure Vessel Code or other applicable codes.

Verification: At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of on-site fabrication or installation of any pressure vessel, the project owner shall submit to the CBO for design review and approval, the above listed documents, including a copy of the signed and stamped engineer's certification, with a copy of the transmittal letter to the CPM.

The project owner shall transmit to the CPM, in the Monthly Compliance Report following completion of any inspection, a copy of the transmittal letter conveying the CBO's and/or Cal-OSHA inspection approvals.

MECH-3: Prior to the start of construction of any heating, ventilating, air conditioning (HVAC) or refrigeration system, the project owner shall submit to the CBO for design review and approval the design plans, specifications, calculations and quality control procedures for that system. Packaged HVAC systems, where used, shall be identified with the appropriate manufacturer's data sheets.

The project owner shall design and install all HVAC and refrigeration systems within buildings and related structures in accordance with the CBC and other applicable codes. Upon completion of any increment of construction, the project owner shall request the CBO's inspection and approval of said construction. The final plans, specifications and calculations shall include approved criteria, assumptions and methods used to develop the design. In addition, the responsible mechanical engineer shall sign and stamp all plans, drawings and calculations and submit a signed statement to the CBO that the proposed final design plans, specifications and calculations conform with the applicable LORS [1998 CBC, Section 108.7, Other Inspections; Section 106.3.4, Architect or Engineer of Record].

Verification: At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of construction of any HVAC or refrigeration system, the project owner shall submit to the CBO the required HVAC and refrigeration calculations, plans and specifications, including a copy of the signed and stamped statement from the responsible mechanical engineer certifying compliance with the CBC and other applicable codes, with a copy of the transmittal letter to the CPM.

ELEC-1: Prior to the start of any increment of electrical construction for electrical equipment and systems 480 volts and higher, listed below, with the exception of underground duct work and any physical layout drawings and drawings not related to code compliance and life safety, the project owner shall submit, for CBO design review and approval, the proposed final design, specifications and calculations [CBC 1998, Section 106.3.2, Submittal documents]. Upon approval, the above listed plans, together with design changes and design change notices, shall remain on the site or at another accessible location for the operating life of

the project. The project owner shall request that the CBO inspect the installation to ensure compliance with the requirements of applicable LORS [1998 CBC, Section 108.4, Approval Required, and Section 108.3, Inspection Requests]. All transmission facilities (lines, switchyards, switching stations, and substations) are handled in Conditions of Certification in the **Transmission System Engineering** section of this document.

A. Final plant design plans to include:

1. one-line diagrams for the 13.8 kV, 4.16 kV and 480 V systems; and
2. system grounding drawings.

B. Final plant calculations to establish:

1. short-circuit ratings of plant equipment;
2. ampacity of feeder cables;
3. voltage drop in feeder cables;
4. system grounding requirements;
5. coordination study calculations for fuses, circuit breakers and protective relay settings for the 13.8 kV, 4.16 kV and 480 V systems;
6. system grounding requirements; and
7. lighting energy calculations.

C. The following activities shall be reported to the CPM in the Monthly Compliance Report:

1. receipt or delay of major electrical equipment;
2. testing or energization of major electrical equipment; and
3. a signed statement by the registered electrical engineer certifying that the proposed final design plans and specifications conform to requirements set forth in the Energy Commission Decision.

Verification: At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of each increment of electrical construction, the project owner shall submit to the CBO for design review and approval the above listed documents. The project owner shall include in this submittal a copy of the signed and stamped statement from the responsible electrical engineer attesting compliance with the applicable LORS, and shall send the CPM a copy of the transmittal letter in the next Monthly Compliance Report.

GENERAL CONDITIONS

ACCESS, COMPLIANCE CONDITION OF CERTIFICATION, COM-1

The CPM, responsible Energy Commission staff, and delegate agencies or consultants, shall be guaranteed and granted unrestricted access to the power plant site, related facilities, project-related staff, and the records maintained on site, for the purpose of conducting audits, surveys, inspections, or general site visits. Although the CPM will normally schedule site visits on dates and times agreeable to the project owner, the CPM reserves the right to make unannounced visits at any time.

COMPLIANCE RECORD, COM-2

The project owner shall maintain project files onsite or at an alternative site approved by the CPM, for the life of the project unless a lesser period of time is specified by the conditions of certification. The files shall contain copies of all "as-built" drawings, all documents submitted as verification for conditions, and all other project-related documents.

Energy Commission staff and delegate agencies shall, upon request to the project owner, be given unrestricted access to the files.

REPORTING OF UNPLANNED OUTAGES, COM-3: DELETED

COMPLIANCE VERIFICATION SUBMITTALS, COM-4

Each condition of certification is followed by a means of verification. The verification describes the Energy Commission's procedure(s) to ensure post-certification compliance with adopted conditions. The verification procedures, unlike the conditions, may be modified as necessary by the CPM, and in most cases without full Energy Commission approval.

Verification of compliance with the conditions of certification can be accomplished by:

1. reporting on the work done and providing the pertinent documentation in monthly and/or annual compliance reports filed by the project owner or authorized agent as required by the specific conditions of certification;
2. providing appropriate letters from delegate agencies verifying compliance;
3. Energy Commission staff audits of project records; and/or
4. Energy Commission staff inspections of mitigation or other evidence of mitigation.

Verification lead times (e.g., 90, 60 and 30-days) associated with start of construction may require the project owner to file submittals during the certification process, particularly if construction is planned to commence shortly after certification.

A cover letter from the project owner or authorized agent is required for all compliance submittals and correspondence pertaining to compliance matters. **The cover letter**

subject line shall identify the involved condition(s) of certification by condition number and include a brief description of the subject of the submittal. The project owner shall also identify those submittals **not** required by a condition of certification with a statement such as: "This submittal is for information only and is not required by a specific condition of certification." When submitting supplementary or corrected information, the project owner shall reference the date of the previous submittal.

The project owner is responsible for the delivery and content of all verification submittals to the CPM, whether such condition was satisfied by work performed by the project owner or an agent of the project owner.

All submittals shall be addressed as follows:

Donna Stone
Compliance Project Manager
California Energy Commission
1516 Ninth Street (MS-2000)
Sacramento, CA 95814

If the project owner desires Energy Commission staff action by a specific date, they shall so state in their submittal and include a detailed explanation of the effects on the project if this date is not met.

PRE-CONSTRUCTION MATRIX, COM-5

Prior to commencing construction a compliance matrix addressing only those conditions that must be fulfilled before the start of construction shall be submitted by the project owner to the CPM. This matrix will be included with the project owner's **first** compliance submittal or prior to the first pre-construction meeting, whichever comes first. It will be in the same format as the compliance matrix referenced above.

TASKS PRIOR TO START OF CONSTRUCTION, COM-5

Construction shall not commence until the pre-construction matrix is submitted, all pre-construction conditions have been complied with, and the CPM has issued a letter to the project owner authorizing construction. Various lead times (e.g., 30, 60, 90 days) for submittal of compliance verification documents to the CPM for conditions of certification are established to allow sufficient staff time to review and comment and, if necessary, allow the project owner to revise the submittal in a timely manner. This will ensure that project construction may proceed according to schedule.

Failure to submit compliance documents within the specified lead-time may result in delays in authorization to commence various stages of project development.

Project owners frequently anticipate starting project construction as soon as the project is certified. In those cases, it may be necessary for the project owner to file compliance submittals prior to project certification if the required lead-time for a required compliance event extends beyond the date anticipated for start of construction. It is also important that the project owner understand that the submittal of compliance documents prior to

project certification is at the owner's own risk. Any approval by Energy Commission staff is subject to change based upon the Final Decision.

MONTHLY COMPLIANCE REPORT, COM-6

The first Monthly Compliance Report is due one month following the Energy Commission business meeting date on which the project was approved, unless otherwise agreed to by the CPM. The first Monthly Compliance Report shall include an initial list of dates for each of the events identified on the Key Events List. The Key Events List is found at the end of this section.

During pre-construction and construction of the project, the project owner or authorized agent shall submit an original and five copies of the Monthly Compliance Report within 10 working days after the end of each reporting month. Monthly Compliance Reports shall be clearly identified for the month being reported. The reports shall contain, at a minimum:

1. a summary of the current project construction status, a revised/updated schedule if there are significant delays, and an explanation of any significant changes to the schedule;
2. documents required by specific conditions to be submitted along with the Monthly Compliance Report. Each of these items must be identified in the transmittal letter, and should be submitted as attachments to the Monthly Compliance Report;
3. an initial, and thereafter updated, compliance matrix which shows the status of all conditions of certification and preconstruction and construction milestones (fully satisfied conditions do not need to be included in the matrix after they have been reported as closed);
4. a list of conditions and milestones that have been satisfied during the reporting period, and a description or reference to the actions which satisfied the condition;
5. a list of any submittal deadlines that were missed accompanied by an explanation and an estimate of when the information will be provided;
6. a cumulative listing of any approved changes to conditions of certification;
7. a listing of any filings with, or permits issued by, other governmental agencies during the month;
8. a projection of project compliance activities scheduled during the next two months. The project owner shall notify the CPM as soon as any changes are made to the project construction schedule that would affect compliance with conditions of certification or milestones;
9. a listing of the month's additions to the on-site compliance file; and
10. any requests to dispose of items that are required to be maintained in the project owner's compliance file.

ANNUAL COMPLIANCE REPORT, COM-7

After the air district has issued a Permit to Operate, the project owner shall submit Annual Compliance Reports instead of Monthly Compliance Reports. The reports are for each year of commercial operation and are due to the CPM each year at a date agreed to by the CPM. Annual Compliance Reports shall be submitted over the life of the project unless otherwise specified by the CPM. Each Annual Compliance Report shall identify the reporting period and shall contain the following:

1. an updated compliance matrix which shows the status of all conditions of certification (fully satisfied and/or closed conditions do not need to be included in the matrix after they have been reported as closed);
2. a summary of the current project operating status and an explanation of any significant changes to facility operations during the year;
3. documents required by specific conditions to be submitted along with the Annual Compliance Report. Each of these items must be identified in the transmittal letter, and should be submitted as attachments to the Annual Compliance Report;
3. a cumulative listing of all post-certification changes approved by the Energy Commission or cleared by the CPM;
4. an explanation for any submittal deadlines that were missed, accompanied by an estimate of when the information will be provided;
5. a listing of filings made to, or permits issued by, other governmental agencies during the year;
6. a projection of project compliance activities scheduled during the next year;
7. a listing of the year's additions to the on-site compliance file;
8. an evaluation of the on-site contingency plan for unplanned facility closure, including any suggestions necessary for bringing the plan up to date [see General Conditions for Facility Closure addressed later in this section]; and
9. a listing of complaints, notices of violation, official warnings, and citations received during the year, a description of the resolution of any resolved complaints, and the status of any unresolved complaints.
10. a listing of all outages planned for the coming year and a listing of all outages that occurred during the previous year, including the anticipated duration and the reason for each outage occurrence.

COMPLIANCE REPORTING, COM-6 AND COM-7

There are two different compliance reports that the project owner must submit to assist the CPM in tracking activities and monitoring compliance with the terms and conditions of the Commission Decision. During construction, the project owner or authorized agent will submit Monthly Compliance Reports. During operation, an Annual Compliance Report must be submitted. These reports, and the requirement for an accompanying compliance matrix, are described below. The majority of the conditions of certification require that compliance submittals be submitted to the CPM in the monthly or annual compliance reports.

COMPLIANCE MATRIX, COM-6 AND COM-7

A compliance matrix shall be submitted by the project owner to the CPM along with each monthly and annual compliance report. The compliance matrix is intended to provide the CPM with the current status of all compliance conditions in a spreadsheet format. The compliance matrix must identify:

1. the technical area;

2. the condition number;
3. a brief description of the verification action or submittal required by the condition;
4. the date the submittal is required (e.g., 60 days prior to construction, after final inspection, etc.);
5. the expected or actual submittal date;
6. the date a submittal or action was approved by the Chief Building Official (CBO), CPM, or delegate agency, if applicable;
7. the compliance status of each condition (e.g., “not started,” “in progress” or “completed” (include the date); and
8. the project’s preconstruction and construction milestones, including dates and status.

Satisfied conditions do not need to be included in the compliance matrix after they have been identified as satisfied in at least one monthly or annual compliance report.

CONSTRUCTION AND OPERATION SECURITY PLAN, COM-8

Prior to commencing construction, a site-specific Security Plan for the construction phase shall be developed and maintained at the project site. At least sixty (60) days prior to the initial receipt of hazardous materials on-site, a site-specific Security Plan and Vulnerability Assessment for the operational phase shall be developed and maintained at the project site. The project owner shall notify the CPM in writing that the Plan is available for review and approval at the project site.

Construction Security Plan

The Construction Security Plan must address:

1. site fencing enclosing the construction area;
2. use of security guards;
3. check-in procedure or tag system for construction personnel and visitors;
4. protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency; and
5. evacuation procedures.

Operation Security Plan

The Operations Security Plan must address:

1. permanent site fencing and security gate;
2. use of security guards;
3. security alarm for critical structures;
4. protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency;
5. evacuation procedures;

6. perimeter breach detectors and on-site motion detectors;
7. video or still camera monitoring system;
8. fire alarm monitoring system;
9. site personnel background checks; and
10. site access for vendors and requirements for Hazardous Materials vendors to conduct personnel background security checks.

In addition, the project owner shall prepare a Vulnerability Assessment and implement site security measures addressing hazardous materials storage and transportation consistent with US EPA and US Department of Justice guidelines.

The CPM may authorize modifications to these measures, or may require additional measures depending on circumstances unique to the facility, and in response to industry-related security concerns.

CONFIDENTIAL INFORMATION, COM-9

Any information that the project owner deems confidential shall be submitted to the Energy Commission's Docket with an application for confidentiality pursuant to Title 20, California Code of Regulations, section 2505(a). Any information that is determined to be confidential shall be kept confidential as provided for in Title 20, California Code of Regulations, section 2501 et. seq.

DEPARTMENT OF FISH AND GAME FILING FEE, COM-10

Pursuant to the provisions of Fish and Game Code Section 711.4, the project owner shall pay a filing fee in the amount of $850. The payment instrument shall be provided to the Energy Commission's Project Manager (PM), not the CPM, at the time of project certification and shall be made payable to the California Department of Fish and Game. The PM will submit the payment to the Office of Planning and Research at the time of filing of the notice of decision pursuant to Public Resources Code Section 21080.5.

REPORTING OF COMPLAINTS, NOTICES, AND CITATIONS, COM-11

Prior to the start of construction, the project owner must send a letter to property owners living within one mile of the project notifying them of a telephone number to contact project representatives with questions, complaints or concerns. If the telephone is not staffed 24 hours per day, it shall include automatic answering with date and time stamp recording. All recorded inquiries shall be responded to within 24 hours. The telephone number shall be posted at the project site and made easily visible to passersby during construction and operation. The telephone number shall be provided to the CPM who will post it on the Energy Commission's web page at:

http://www.energy.ca.gov/sitingcases/power_plants_contacts.html

Any changes to the telephone number shall be submitted immediately to the CPM who will update the web page.

In addition to the monthly and annual compliance reporting requirements described above, the project owner shall report and provide copies of all complaint forms, notices of violation, notices of fines, official warnings, and citations, within 10 days of receipt, to the CPM. Complaints shall be logged and numbered. Noise complaints shall be recorded on the form provided in the **NOISE** conditions of certification. All other complaints shall be recorded on the complaint form (Attachment A).

FACILITY CLOSURE, COM-12 AND COM-13

At some point in the future, the project will cease operation and close down. At that time, it will be necessary to ensure that the closure occurs in such a way that public health and safety and the environment are protected from adverse impacts. Although the project setting for this project does not appear, at this time, to present any special or unusual closure problems, it is impossible to foresee what the situation will be in 30 years or more when the project ceases operation. Therefore, provisions must be made that provide the flexibility to deal with the specific situation and project setting that exist at the time of closure. Laws, Ordinances, Regulations and Standards (LORS) pertaining to facility closure are identified in the sections dealing with each technical area. Facility closure will be consistent with LORS in effect at the time of closure.

There are at least three circumstances in which a facility closure can take place, planned closure, unplanned temporary closure and unplanned permanent closure.

Closure Definitions

Planned Closure

A planned closure occurs at the end of a project's life, when the facility is closed in an anticipated, orderly manner, at the end of its useful economic or mechanical life, or due to gradual obsolescence.

Unplanned Temporary Closure

An unplanned temporary closure occurs when the facility is closed suddenly and/or unexpectedly, on a short-term basis, due to unforeseen circumstances such as a natural disaster or an emergency.

Unplanned Permanent Closure

An unplanned permanent closure occurs if the project owner closes the facility suddenly and/or unexpectedly, on a permanent basis. This includes unplanned closure where the owner remains accountable for implementing the on-site contingency plan. It can also include unplanned closure where the project owner is unable to implement the contingency plan, and the project is essentially abandoned.

GENERAL CONDITIONS FOR FACILITY CLOSURE

PLANNED CLOSURE, COM-12

In order to ensure that a planned facility closure does not create adverse impacts, a closure process that provides for careful consideration of available options and applicable laws, ordinances, regulations, standards, and local/regional plans in existence at the time of closure, will be undertaken. To ensure adequate review of a planned project closure, the project owner shall submit a proposed facility closure plan to the Energy Commission for review and approval at least twelve months prior to commencement of closure activities (or other period of time agreed to by the CPM). The project owner shall file 120 copies (or other number of copies agreed upon by the CPM) of a proposed facility closure plan with the Energy Commission.
The plan shall:

1. identify and discuss any impacts and mitigation to address significant adverse impacts associated with proposed closure activities and to address facilities, equipment, or other project related remnants that will remain at the site;
2. identify a schedule of activities for closure of the power plant site, transmission line corridor, and all other appurtenant facilities constructed as part of the project;
3. identify any facilities or equipment intended to remain on site after closure, the reason, and any future use; and
4. address conformance of the plan with all applicable laws, ordinances, regulations, standards, local/regional plans in existence at the time of facility closure, and applicable conditions of certification.

In the event that there are significant issues associated with the proposed facility closure plan's approval, or the desires of local officials or interested parties are inconsistent with the plan, the CPM shall hold one or more workshops and/or the Energy Commission may hold public hearings as part of its approval procedure.

In addition, prior to submittal of the proposed facility closure plan, a meeting shall be held between the project owner and the Energy Commission CPM for the purpose of discussing the specific contents of the plan.

As necessary, prior to or during the closure plan process, the project owner shall take appropriate steps to eliminate any immediate threats to public health and safety and the environment, but shall not commence any other closure activities, until Energy Commission approval of the facility closure plan is obtained.

UNPLANNED TEMPORARY CLOSURE/ON-SITE CONTINGENCY PLAN, COM-13

In order to ensure that public health and safety and the environment are protected in the event of an unplanned temporary facility closure, it is essential to have an on-site contingency plan in place. The on-site contingency plan will help to ensure that all necessary steps to mitigate public health and safety impacts and environmental impacts are taken in a timely manner.

The project owner shall submit an on-site contingency plan for CPM review and approval. The plan shall be submitted no less that 60 days (or other time agreed to by the CPM) prior to commencement of commercial operation. The approved plan must be in place prior to commercial operation of the facility and shall be kept at the site at all times.

The project owner, in consultation with the CPM, will update the on-site contingency plan as necessary. The CPM may require revisions to the on-site contingency plan over the life of the project. In the annual compliance reports submitted to the Energy Commission, the project owner will review the on-site contingency plan, and recommend changes to bring the plan up to date. Any changes to the plan must be approved by the CPM.

The on-site contingency plan shall provide for taking immediate steps to secure the facility from trespassing or encroachment. In addition, for closures of more than 90 days, unless other arrangements are agreed to by the CPM, the plan shall provide for removal of hazardous materials and hazardous wastes, draining of all chemicals from storage tanks and other equipment and the safe shutdown of all equipment. (Also see specific conditions of certification for the technical areas of Hazardous Materials Management and Waste Management.)

In addition, consistent with requirements under unplanned permanent closure addressed below, the nature and extent of insurance coverage, and major equipment warranties must also be included in the on-site contingency plan. In addition, the status of the insurance coverage and major equipment warranties must be updated in the annual compliance reports.

In the event of an unplanned temporary closure, the project owner shall notify the CPM, as well as other responsible agencies, by telephone, fax, or e-mail, within 24 hours and shall take all necessary steps to implement the on-site contingency plan. The project owner shall keep the CPM informed of the circumstances and expected duration of the closure.

If the CPM determines that an unplanned temporary closure is likely to be permanent, or for a duration of more than twelve months, a closure plan consistent with the requirements for a planned closure shall be developed and submitted to the CPM within 90 days of the CPM's determination (or other period of time agreed to by the CPM).

UNPLANNED PERMANENT CLOSURE/ON-SITE CONTINGENCY PLAN, COM-13

The on-site contingency plan required for unplanned temporary closure shall also cover unplanned permanent facility closure. All of the requirements specified for unplanned temporary closure shall also apply to unplanned permanent closure.

In addition, the on-site contingency plan shall address how the project owner will ensure that all required closure steps will be successfully undertaken in the unlikely event of abandonment.

In the event of an unplanned permanent closure, the project owner shall notify the CPM, as well as other responsible agencies, by telephone, fax, or e-mail, within 24 hours and shall take all necessary steps to implement the on-site contingency plan. The project owner shall keep the CPM informed of the status of all closure activities.

A closure plan, consistent with the requirements for a planned closure, shall be developed and submitted to the CPM within 90 days of the permanent closure or another period of time agreed to by the CPM.

POST CERTIFICATION CHANGES TO THE ENERGY COMMISSION DECISION: AMENDMENTS, INSIGNIFICANT PROJECT CHANGES AND VERIFICATION CHANGES, COM-14

The project owner must petition the Energy Commission, pursuant to Title 20, California Code of Regulations, section 1769, to 1) delete or change a condition of certification; 2) modify the project design or operational requirements; and 3) transfer ownership or operational control of the facility.

A petition is required for **amendments** and for **insignificant project changes**. For verification changes, a letter from the project owner is sufficient. In all cases, the petition or letter requesting a change should be submitted to the Energy Commission's Docket in accordance with Title 20, California Code of Regulations, section 1209.

The criteria that determine which type of change process applies are explained below.

Amendment

A proposed change will be processed as an amendment if it involves a change to the requirement or protocol, or in some cases the verification portion of a condition of certification, an ownership or operator change, or a potential significant environmental impact.

Insignificant Project Change

The proposed change will be processed as an insignificant project change if it does not require changing the language in a condition of certification, have a potential for significant environmental impact, and cause the project to violate laws, ordinances, regulations or standards.

Verification Change

As provided in Title 20, Section 1770 (d), California Code of Regulations, a verification may be modified by staff without requesting an amendment to the decision if the change does not conflict with the conditions of certification.

KEY EVENTS LIST, COM-6

PROJECT: **El Segundo Power Plant Project**

DOCKET #: 00-AFC-14

COMPLIANCE PROJECT MANAGER:

EVENT DESCRIPTION	**DATE**
Certification Date/Obtain Site Control	
Online Date	
POWER PLANT SITE ACTIVITIES	
Start Site Mobilization	
Start Ground Disturbance	
Start Grading	
Start Construction	
Begin Pouring Major Foundation Concrete	
Begin Installation of Major Equipment	
Completion of Installation of Major Equipment	
First Combustion of Gas Turbine	
Start Commercial Operation	
Complete All Construction	
TRANSMISSION LINE ACTIVITIES	
Start T/L Construction	
SYNCHRONIZATION WITH GRID AND INTERCONNECTION	
COMPLETE T/L CONSTRUCTION	
FUEL SUPPLY LINE ACTIVITIES	
Start Gas Pipeline Construction and Interconnection	
COMPLETE GAS PIPELINE CONSTRUCTION	
WATER SUPPLY LINE ACTIVITIES	
START WATER SUPPLY LINE CONSTRUCTION	
COMPLETE WATER SUPPLY LINE CONSTRUCTION	

TABLE 1
COMPLIANCE SECTION

SUMMARY of GENERAL CONDITIONS OF CERTIFICATION			
CONDITION NUMBER	**PAGE #**	**SUBJECT**	**DESCRIPTION**
COM-1	4	ACCESS	THE PROJECT OWNER SHALL GRANT ENERGY COMMISSION STAFF AND DELEGATE AGENCIES OR CONSULTANTS UNRESTRICTED ACCESS TO THE POWER PLANT SITE.
COM-2	4	COMPLIANCE RECORD	THE PROJECT OWNER SHALL MAINTAIN PROJECT FILES ON-SITE. ENERGY COMMISSION STAFF AND DELEGATE AGENCIES SHALL BE GIVEN UNRESTRICTED ACCESS TO THE FILES.
COM-3	4	REPORTING OF UNPLANNED OUTAGES	DELETED
COM-4	4	COMPLIANCE VERIFICATION SUBMITTALS	THE PROJECT OWNER IS RESPONSIBLE FOR THE DELIVERY AND CONTENT OF ALL VERIFICATION SUBMITTALS TO THE CPM, WHETHER SUCH CONDITION WAS SATISFIED BY WORK PERFORMED OR THE PROJECT OWNER OR HIS AGENT.
COM-5	6, 7	PRECONSTRUCTION SUBMITTALS	CONSTRUCTION SHALL NOT COMMENCE UNTIL THE ALL OF THE FOLLOWING ACTIVITIES/SUBMITTALS HAVE BEEN COMPLETED: ▪ PROPERTY OWNERS LIVING WITHIN ONE MILE OF THE PROJECT HAVE BEEN NOTIFIED OF A TELEPHONE NUMBER TO CONTACT FOR QUESTIONS, COMPLAINTS OR CONCERNS, ▪ A PRE-CONSTRUCTION MATRIX HAS BEEN SUBMITTED IDENTIFYING ONLY THOSE CONDITIONS THAT MUST BE FULFILLED BEFORE THE START OF CONSTRUCTION, ▪ ALL PRE-CONSTRUCTION CONDITIONS HAVE BEEN COMPLIED WITH, ▪ THE CPM HAS ISSUED A LETTER TO THE PROJECT OWNER AUTHORIZING CONSTRUCTION.
COM-6	5, 6, 7	COMPLIANCE REPORTING DURING CONSTRUCTION: MONTHLY COMPLIANCE REPORTS	DURING CONSTRUCTION, THE PROJECT OWNER SHALL SUBMIT MONTHLY COMPLIANCE REPORTS (MCRS) WHICH INCLUDE SPECIFIC INFORMATION. THE FIRST MCR IS DUE THE MONTH FOLLOWING THE COMMISSION BUSINESS MEETING DATE ON WHICH THE PROJECT WAS APPROVED AND SHALL INCLUDE AN INITIAL LIST OF DATES FOR EACH OF THE EVENTS IDENTIFIED ON THE KEY EVENTS LIST.

SUMMARY of GENERAL CONDITIONS OF CERTIFICATION			
CONDITION NUMBER	**PAGE #**	**SUBJECT**	**DESCRIPTION**
COM-7	5, 6, 8	COMPLIANCE REPORTING DURING OPERATION: ANNUAL COMPLIANCE REPORTS	AFTER CONSTRUCTION ENDS AND THROUGHOUT THE LIFE OF THE PROJECT, THE PROJECT OWNER SHALL SUBMIT ANNUAL COMPLIANCE REPORTS (ACRS) WHICH INCLUDE SPECIFIC INFORMATION. THE FIRST ACR IS DUE AFTER THE AIR DISTRICT HAS ISSUED A PERMIT TO OPERATE.
COM-8	6	SECURITY PLANS	PRIOR TO COMMENCING CONSTRUCTION, THE PROJECT OWNER SHALL SUBMIT A CONSTRUCTION SECURITY PLAN. PRIOR TO COMMENCING OPERATION, THE PROJECT OWNER SHALL SUBMIT AN OPERATION SECURITY PLAN.
COM-9	9	CONFIDENTIAL INFORMATION	ANY INFORMATION THE PROJECT OWNER DEEMS CONFIDENTIAL SHALL BE SUBMITTED TO THE COMMISSION'S DOCKETS UNIT.
COM-10	9	DEPT OF FISH AND GAME FILING FEE	THE PROJECT OWNER SHALL PAY A FILING FEE OF $850 AT THE TIME OF PROJECT CERTIFICATION.
COM-11	10	REPORTING OF COMPLAINTS, NOTICES AND CITATIONS	WITHIN 10 DAYS OF RECEIPT, THE PROJECT OWNER SHALL REPORT TO THE CPM, ALL NOTICES, COMPLAINTS, AND CITATIONS.
COM-12	11, 12	PLANNED FACILITY CLOSURE	THE PROJECT OWNER SHALL SUBMIT A CLOSURE PLAN TO THE CPM AT LEAST TWELVE MONTHS PRIOR TO COMMENCEMENT OF A PLANNED CLOSURE.
COM-13	11, 12, 13	UNPLANNED FACILITY CLOSURE	To ensure that public health and safety and the environment are protected in the event of an unplanned closure (either temporary or permanent) the project owner shall submit an on-site contingency plan no less than 60 days prior to commencement of commercial operation.
COM-14	16	POST-CERTIFICATION CHANGES TO THE DECISION	THE PROJECT OWNER MUST PETITION THE ENERGY COMMISSION TO DELETE OR CHANGE A CONDITION OF CERTIFICATION, MODIFY THE PROJECT DESIGN OR OPERATIONAL REQUIREMENTS AND/OR TRANSFER OWNERSHIP OF OPERATIONAL CONTROL OF THE FACILITY.
COM-15	10	PRE-CONSTRUCTION AND CONSTRUCTION MILESTONES	THE PROJECT OWNER MUST ESTABLISH MILESTONES FOR PRE-CONSTRUCTION AND CONSTRUCTION PHASES OF THE PROJECT.

ATTACHMENT A

COMPLAINT REPORT/RESOLUTION FORM

PROJECT NAME: **El Segundo Power Plant Project** AFC Number: **00-AFC-14**
COMPLAINT LOG NUMBER _____ Complainant's name and address: Phone number
Date and time complaint received: Indicate if by telephone or in writing (attach copy if written): Date of first occurrence:
Description of complaint (including dates, frequency, and duration):
Findings of investigation by plant personnel: Indicate if complaint relates to violation of a CEC requirement: Date complainant contacted to discuss findings:
Description of corrective measures taken or other complaint resolution: Indicate if complainant agrees with proposed resolution: If not, explain: Other relevant information:
If corrective action necessary, date completed: Date first letter sent to complainant: _____(copy attached) Date final letter sent to complainant: _____(copy attached)
This information is certified to be correct. Plant Manager's Signature: _____ Date:

(Attach additional pages and supporting documentation, as required.)

GEOLOGY AND PALEONTOLOGY

GEO-1: Prior to the start of construction, the project owner shall assign to the project an engineering geologist(s) and a geotechnical engineer(s) certified by the State of California, to carry out the duties required by the 1998 edition of the California Building Code (CBC) Appendix Chapter 33, Section 3309.4. The certified engineering geologist(s) and geotechnical engineer(s) assigned must be approved by the CBO and submitted to the Compliance Project Manager (CPM) for concurrence.

At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CPM) prior to the start of construction, the project owner shall submit to the CBO for approval the resume and and license number(s) of the certified engineering geologist(s) and geotechnical engineer(s) assigned to the project. The submittal should include a statement that CPM concurrence is needed.

Verification: The CBO and CPM will approve or disapprove of the engineering geologist(s) and geotechnical engineer(s) and will notify the project owner of its findings within 15 days of receipt of the submittal. If the engineering geologist(s) and geotechnical engineer(s) are subsequently replaced, the project owner shall submit for approval the resume(s) and license number(s) of the newly assigned individual(s) to the CBO and CPM. The CBO and CPM will approve or disapprove of the engineering geologist(s) and geotechnical engineer(s) and will notify the project owner of the findings within 15 days of receipt of the notice of personnel change.

GEO-2: Prior to the initiation of ground disturbance, the owner shall have a liquefaction analysis conducted for the power plant site and adjacent existing cut slope to the east. The liquefaction analysis shall be implemented by following the recommended procedures contained in *Recommended Procedures for Implementation of California Division of Mines and Geology Special Publication 117, Guidelines for Analyzing and Mitigating Liquefaction Hazards in California* dated March 1999. (The document is available through the Southern California Earthquake Center at the University of Southern California.)

Verification: The project owner shall include in the application for a grading permit (see **Condition of Certification GEO-5**) a report of the liquefaction analysis and a summary of how the results of this analysis were incorporated into the project foundation and grading plan design for the CBO's review and comment. A copy of the liquefaction analysis and summary of incorporated results shall be sent to the CPM prior to grading.

GEO-3: Prior to completion of the final design of the project, the owner shall have a slope stability analysis conducted for the existing cut slope east of Units 1 and 2. The analysis shall consider both static and earthquake conditions, as well as the effects of any liquefaction of the foundation soils. Since cohesionless soils may be present, the proposed 1.5:1 perimeter excavation should also be evaluated for stability, but only for static conditions.

Verification: The project owner shall include in the application for a grading permit (see Condition of Certification **GEO-5** below) a report of the slope stability analysis and a summary of how the results of this analysis were incorporated into the project foundation and grading plan for the CBO's review and comment. A copy of the CBO's comments shall be sent to the CPM prior to grading.

GEO-4: Applicant shall designate and use a Coastal or Geotechnical Engineer, or geologist familiar with geomorphology, to conduct a shoreline monitoring program and assess erosion on the beach area and at the foot of the revetment on an annual basis for at least ten years. Applicant shall report such results to the CPM and California Coastal Commission annually.

A detailed baseline survey is required, along with some historical research including air photos, a summary of past beach nourishment and shoreline damage. Sand sampling and testing shall be conducted. A series of onshore/offshore shore-normal transects every few hundred feet shall be conducted 4 times per year. Annually, photos from set positions can be taken (e.g. from the groin and from a high elevation in the plant). Shoreline response during and after a major storm will be documented.

After ten continuous years of monitoring, the owner shall prepare and submit a final report. The final report will serve as the annual report for year ten and will include a summary of findings over the 10-year period. Based on the ten-year summary report, the final report will include recommendations for either:

- continued monitoring on an annual basis in accordance with the established protocol if there is evidence of an adverse shoreline erosion condition;

- modifications to the monitoring program and continuation of the program, if modifications are warranted to increase, decrease, otherwise adjust the type and frequency of data collected; or,

- suspension of monitoring due to absence of an adverse shoreline erosion condition related to construction and operation of the ESPR.

Verification: At least thirty days prior to commencing construction, the applicant shall designate the geologist and submit for approval the resumes of the engineer or geologist to the CBO and CPM. The engineer or geologist shall be experienced in shoreline monitoring, and understand coastal processes. Applicant shall submit as part of its annual compliance report the results of the assessment. Applicant shall also, at that time, forward the results to the California Coastal Commission and the City of El Segundo with a copy of the transmittal letter to the CPM. During the first 3 years following commencement of construction, the applicant shall submit the above mentioned quarterly reports. The tenth annual report shall contain the final report.

GEO-5: The assigned engineering geologist(s) shall carry out the duties required by the 1998 CBC, Appendix Chapter 33, Section 3309.4 Engineered Grading Requirements, and Section 3318.1 - Final Reports. Those duties are:

- Prepare the Engineering Geology Report. This report shall accompany the Plans and Specifications when applying to the CBO for the grading permit.
- Monitor geologic conditions during construction.
- Prepare the Final Engineering Geology Report.

The Engineering Geology Report required by the 1998 CBC Appendix Chapter 33, Section 3309.3 Grading Designation, shall include an adequate description of the geology of the site, conclusions, and recommendations regarding the effect of geologic conditions on the proposed development, and an opinion on the adequacy of the site for the intended use as affected by geologic factors.

The Final Engineering Geology Report to be completed after completion of grading, as required by the 1998 CBC Appendix Chapter 33, Section 3318.1, shall contain the following: A final description of the geology of the site and any new information disclosed during grading; and the effect of same on recommendations incorporated in the approved grading plan. The engineering geologist shall submit a statement that, to the best of his or her knowledge, the work within their area of responsibility is in accordance with the approved Engineering Geology Report and applicable provisions of this chapter.

Verification:

(1) Within 15 days after submittal of the application(s) for grading permit(s) to the CBO, the project owner shall submit a signed statement to the CPM stating that the Engineering Geology Report has been submitted to the CBO as a supplement to the plans and specifications and that the recommendations contained in the report are incorporated into the plans and specifications.

(2) Within 90 days following completion of the final grading, the project owner shall submit copies of the Final Engineering Geology Report required by the 1998 CBC Appendix Chapter 33, Section 3318 Completion of Work, to the CBO and to the CPM.

GEO-6: The design for additional seawall or perimeter wall, including any necessary modifications to the existing seawall, shall be performed by a coastal engineer, geotechnical engineer, or engineering geologist, familiar with coastal processes and in accordance with the requirements of the California Coastal Commission Procedural Memo #19 (July 29, 1992).

If additional seawall is installed, performance of the seawall, with respect to shoreline erosion, will need to be addressed and verified in the shoreline monitoring program described under **GEO-4**. The wall should be textured and colored appropriately to minimize visual impacts.

Verification: Once a seawall design plan is available, the applicant shall obtain approval of the design and construction methods from the CBO who will forward all approved plans and comments to the CPM. The CPM shall then forward this information to the Coastal Commission and the City of El Segundo.

PAL-1: The project owner shall provide the CPM with the resume and qualifications of its Paleontological Resource Specialist (PRS) and Paleontological Resource Monitors (PRMs) for review and approval. If the approved PRS or one of the

PRMs is replaced prior to completion of project mitigation and report, the project owner shall obtain CPM approval of the replacement.

The resume shall include the names and phone numbers of contacts. The resume shall also demonstrate to the satisfaction of the CPM, the appropriate education and experience to accomplish the required paleontological resource tasks.

As determined by the CPM, the PRS shall meet the minimum qualifications for a vertebrate paleontologist as described in the Society of Vertebrate Paleontologists (SVP) guidelines of 1995. The experience of the PRS shall include the following:

1. institutional affiliations or appropriate credentials and college degree;
2. ability to recognize and recover fossils in the field;
3. local geological and biostratigraphic expertise;
4. proficiency in identifying vertebrate and invertebrate fossils;
5. publications in scientific journals; and
6. the PRS shall have at least three years of paleontological resource mitigation and field experience in California, and at least one year of experience leading paleontological resource mitigation and field activities.

The PRS shall obtain qualified paleontological resource monitors to monitor as necessary on the project. Paleontologic resource monitors (PRMs) shall have the equivalent of the following qualifications:

1) BS or BA degree in geology or paleontology and one year experience monitoring in California; or
2) AS or AA in geology, paleontology or biology and four years experience monitoring in California; or
3) Enrollment in upper division classes pursuing a degree in the fields of geology or paleontology and two years of monitoring experience in California.

Verification:

1. At least 60 days prior to the start of ground disturbance, the project owner shall submit a resume and statement of availability of its designated PRS for on-site work.

2. At least 20 days prior to ground disturbance, the PRS or project owner shall provide a letter with resumes naming anticipated monitors for the project and stating that the identified monitors meet the minimum qualifications for paleontological resource monitoring required by the condition. If additional monitors are obtained during the project, the PRS shall provide additional letters and resumes to the CPM for approval. The letter shall be provided to the CPM no later than one week prior to the monitor beginning on-site duties.

3. Prior to the termination or release of a PRS, the project owner shall submit the resume of the proposed new PRS to the CPM for review and approval.

PAL-2: The project owner shall provide to the PRS and the CPM, for approval, maps and drawings showing the footprint of the power plant and all linear facilities. Maps shall identify all areas of the project where ground disturbance is anticipated. If the PRS requests enlargements or strip maps for linear facility routes, the project owner shall provide copies to the PRS and CPM. The site grading plan and the plan and profile drawings for the utility lines would normally be acceptable for this purpose. The plan drawings should show the location, depth, and extent of all ground disturbances and can be 1 inch = 40 feet to 1 inch = 100 feet range. If the footprint of the power plant or linear facility changes, the project owner shall provide maps and drawings reflecting these changes to the PRS and CPM.

If construction of the project will proceed in phases, maps and drawings may be submitted prior to the start of each phase. A letter identifying the proposed schedule of each project phase shall be provided to the PRS and CPM. Prior to work commencing on affected phases, the project owner shall notify the PRS and CPM of any construction phase scheduling changes.

At a minimum, the PRS shall consult weekly with the project superintendent or construction field manager to confirm area(s) to be worked during the next week, until ground disturbance is completed.

Verification:

1. At least 30 days prior to the start of ground disturbance, the project owner shall provide the maps and drawings.

2. If there are changes to the footprint of the project, revised maps and drawings shall be provided at least 15 days prior to the start of ground disturbance.

3. If there are changes to the scheduling of the construction phases, the project owner shall submit a letter to the CPM within 5 days of identifying the changes.

PAL-3: The PRS shall prepare, and the project owner shall submit to the CPM for review and approval, a Paleontological Resources Monitoring and Mitigation Plan (PRMMP) to identify general and specific measures to minimize potential impacts to significant paleontological resources. Approval of the PRMMP by the CPM shall occur prior to any ground disturbance. The PRMMP shall function as the formal guide for monitoring, collecting and sampling activities and may be modified with CPM approval. This document shall be used as a basis for discussion in the event that on-site decisions or changes are proposed. Copies of the PRMMP shall reside with the PRS, each monitor, the project owner's on-site manager, and the CPM.

The PRMMP shall be developed in accordance with the guidelines of the Society of the Vertebrate Paleontologists (SVP, 1995) and shall include, but not be limited to, the following:

1) Assurance that the performance and sequence of project-related tasks, such as any literature searches, pre-construction surveys, worker

environmental training, fieldwork, flagging or staking; construction monitoring; mapping and data recovery; fossil preparation and recovery; identification and inventory; preparation of final reports; and transmittal of materials for curation will be performed according to the PRMMP procedures;

2) Identification of the person(s) expected to assist with each of the tasks identified within the PRMMP and all conditions for certification;

3) A thorough discussion of the anticipated geologic units expected to be encountered, the location and depth of the units relative to the project when known, and the known sensitivity of those units based on the occurrence of fossils either in that unit or in correlative units;

4) An explanation of why, how, and how much sampling is expected to take place and in what units. Include descriptions of different sampling procedures that shall be used for fine-grained and coarse-grained beds;

5) A discussion of the locations of where the monitoring of project construction activities is deemed necessary, and a proposed schedule for the monitoring;

6) A discussion of the procedures to be followed in the event of a significant fossil discovery, including notifications;

7) A discussion of equipment and supplies necessary for recovery of fossil materials and any specialized equipment needed to prepare, remove, load, transport, and analyze large-sized fossils or extensive fossil deposits;

8) Procedures for inventory, preparation, and delivery for curation into a retrievable storage collection in a public repository or museum, which meets the Society of Vertebrate Paleontologists standards and requirements for the curation of paleontological resources; and

9) Identification of the institution that has agreed to receive any data and fossil materials recovered, requirements or specifications for materials delivered for curation and how they will be met, and the name and phone number of the contact person at the institution; and,

10) A copy of the paleontological conditions of certification.

Verification: At least thirty (30) days prior to ground disturbance, the project owner shall provide a copy of the PRMMP. The PRMMP shall include an affidavit of authorship by the PRS, and acceptance of the project owner evidenced by a signature.

PAL-4: Prior to ground disturbance and for the duration of construction, the project owner and the PRS shall prepare and conduct weekly CPM-approved training for all project managers, construction supervisors and workers who operate ground disturbing equipment or tools. Workers to be involved in ground disturbing activities in sensitive units shall not operate equipment prior to receiving worker training. The training program may be combined with other training programs prepared for cultural and biological resources, hazardous materials, or any other areas of interest or concern.

The Worker Environmental Awareness Program (WEAP) shall address the potential to encounter paleontological resources in the field, the sensitivity and importance of these resources, and the legal obligations to preserve and protect such resources. In-person training shall be provided for each new employee involved with ground disturbing activities, while these activities are occurring in highly sensitive geologic units, as detailed in the PRMMP. The in-person training shall occur within four days following a new hire for highly sensitive sites and as established by the PRMMP for sites of moderate, low, and zero sensitivity. Provisions will be made to provide the WEAP training to workers not fluent in English.

The training shall include:

1. A discussion of applicable laws and penalties under the law;
2. For training in locations of high sensitivity, the PRS shall provide good quality photographs or physical examples of vertebrate fossils that may be expected in the area;
3. Information that the PRS or PRM has the authority to halt or redirect construction in the event of a discovery or unanticipated impact to a paleontological resource;
4. Instruction that employees are to halt or redirect work in the vicinity of a find and to contact their supervisor and the PRS or PRM;
5. An informational brochure that identifies reporting procedures in the event of a discovery;
6. A Certification of Completion of WEAP form signed by each worker indicating that they have received the training; and

7. A sticker that shall be placed on hard hats indicating that environmental training has been completed.

Verification:

1. At least 30 days prior to ground disturbance, the project owner shall submit the proposed WEAP including the brochure with the set of reporting procedures the workers are to follow.

2. At least 30 days prior to ground disturbance, the project owner shall submit the script and final video to the CPM for approval if the project owner is planning on using a video for interim training.

3. If an alternate paleontological trainer is requested by the owner, the resume and qualifications of the trainer shall be submitted to the CPM for review and approval. Alternate trainers shall not conduct training prior to CPM authorization.

4. The project owner shall provide in the Monthly Compliance Report the WEAP copies of the Certification of Completion forms with the names of those trained and the trainer for each training offered that month. The Monthly Compliance Report shall also include a running total of all persons who have completed the training to date.

PAL-5: The PRS and PRM(s) shall monitor consistent with the PRMMP, all construction-related grading, excavation, trenching, and augering in areas where potentially fossil-bearing materials have been identified. In the event that the PRS determines full time monitoring is not necessary in locations that were identified as potentially fossil-bearing in the PRMMP, the PRS shall notify and seek the concurrence of the CPM.

The PRS and PRM(s) shall have the authority to halt or redirect construction if paleontological resources are encountered. The project owner shall ensure that there is no interference with monitoring activities unless directed by the PRS. Monitoring activities shall be conducted as follows:

1) Any change of monitoring different from the accepted schedule presented in the PRMMP shall be proposed in a letter from the PRS and the project owner to the CPM prior to the change in monitoring. The letter shall include the justification for the change in monitoring and submitted to the CPM for review and approval.

2) PRM(s) shall keep a daily log of monitoring of paleontological resource activities. The PRS may informally discuss paleontological resource monitoring and mitigation activities with the CPM at any time.

3) The PRS shall immediately notify the project owner and the CPM of any incidents of non-compliance with any paleontological resources conditions of certification. The PRS shall recommend corrective action to resolve the issues or achieve compliance with the conditions of certification.

4) For any significant paleontological resources encountered, either the project owner or the PRS shall notify the CPM immediately (no later than the following morning after the find, or Monday morning in the case of a weekend) of any halt of construction activities.

Verification: The PRS shall prepare a summary of the monitoring and other paleontological activities that will be placed in the Monthly Compliance Reports. The summary will include the name(s) of PRS or monitor(s) active during the month; general descriptions of training and construction activities and general locations of excavations, grading, etc. A section of the report will include the geologic units or subunits encountered; descriptions of sampling within each unit; and a list of fossils identified in the field. A final section of the report will address any issues or concerns about the project relating to paleontologic monitoring including any incidents of non-compliance and any changes to the monitoring plan that have been approved by the CPM. If no monitoring took place during the month, the project shall include a justification in summary as to why monitoring was not conducted.

The PRS shall submit the summary of monitoring and paleontological activities in the Monthly Compliance Report.

PAL-6: The project owner, through the designated PRS, shall ensure the recovery, preparation for analysis, analysis, identification and inventory, the preparation for curation, and the delivery for curation of all significant paleontological resource materials encountered and collected during the monitoring, data recovery, mapping, and mitigation activities related to the project.

Verification: The project owner shall maintain in their compliance file copies of signed contracts or agreements with the designated PRS and other qualified research specialists. The project owner shall maintain these files for a period of three years after completion and approval of the CPM-approved PRR. The project owner shall be responsible to pay curation fees for fossils collected and curated as a result of paleontological monitoring and mitigation.

PAL-7: The project owner shall ensure preparation of a Paleontological Resources Report (PRR) by the designated PRS. The PRR shall be prepared following completion of the ground disturbing activities. The PRR shall include an analysis of the recovered fossil materials and related information and submitted to the CPM for review and approval.

The report shall include, but not be limited to, a description and inventory of recovered fossil materials; a map showing the location of paleontological resources encountered; determinations of sensitivity and significance; and a statement by the PRS that project impacts to paleontological resources have been mitigated.

Verification: Within ninety (90) days after completion of ground disturbing activities, including landscaping, the project owner shall submit the Paleontological Resources Report under confidential cover.

Certification of Completion of Worker
Environmental Awareness Program

POWER PLANT NAME (DOCKET #)

This is to certify these individuals have completed a mandatory California Energy Commission-approved Worker Environmental Awareness Program (WEAP). The WEAP includes pertinent information on Cultural, Paleontology & Biology Resources for all personnel (i.e. construction supervisors, crews and plant operators) working on-site or at related facilities. By signing below, the participant indicates that they understand and shall abide by the guidelines set forth in the Program materials. Please include this completed form in your Monthly Compliance Report.

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Cul Trainer: _____ Signature:_____ Date: ___/___/__
PaleoTrainer: _____ Signature:_____ Date: ___/___/__
Bio Trainer: _____ Signature:_____ Date: ___/___/__

HAZARDOUS MATERIALS MANAGEMENT

HAZ-1: The project owner shall obtain the advance approval of the CPM if the facility intends to store, handle, use or move (or combination of these activities) a

material, in quantities that exceed those specified in Title 40, CFR Part 355, Subpart J section 355.50 or in greater quantities than those identified by chemical name in the revised Table 5.15-2 (revised as of June 7, 2001) in the AFC, unless approved in advance by the CPM.

Verification: The project owner shall provide to the CPM, in the Annual Compliance Report, a list of those hazardous materials designated as regulated substances as set forth in Title 40, CFR Part 355, Subpart J section 355.50. The list shall also include maximum quantities of these substances at the facility. Copies of the list should also be provided to the City of El Segundo Fire Department (CESFD) and the City of Manhattan Beach Fire Department (CMBFD).

HAZ-2: The project owner shall update its existing Business Plan.

Verification: At least 45 days prior to the startup of the ESPR project Units 5, 6 and 7, the owner shall undertake a hazardous materials floor plan exercise with the CESFD and provide a copy of the revised Business Plan, commented on by the CESFD, to the CPM. A copy of the revised Plan shall also be provided to the CMBFD.

HAZ-3 The project owner shall revise the existing CalARP Program Risk Management Plan (RMP). Similarly, the project owner shall also revise its existing RMP pursuant to the USEPA RMP Program. Both RMPs shall be expanded to include discussions to prevent and control the accidental release of ammonia from the pipeline. Those discussions shall elaborate on the various safety devices selected for the pipeline including double sleeve construction, provisions for backup safety devices, protective shut-in actions, emergency support systems, monitoring programs and personnel training, as a minimum. The shut-in actions shall include responses to pipeline overpressures and also leaks.

Verification: At least 45 days prior to startup of Units 5, 6, and 7, the project owner shall furnish a final copy of each updated RMP to the CPM, CESFD and CMBFD. An initial draft of the CalARP RMP shall be provided to the CPM and the CESFD for review and comments. The final CalARP RMP shall be approved by the CPM. Similarly, an initial draft of the USEPA RMP shall be provided to the CPM and the CESFD for review and comments, at the time it is submitted to the USEPA for review. The final copy of the USEPA RMP shall reflect recommendations of the CPM and the CESFD.

HAZ-4 The project owner shall undertake a feasibility study for the substitution of the 35% hydrazine with a less hazardous chemical. Should the study conclude that substitution is infeasible and**/or** the project owner elects to continue the use of the 35% hydrazine, then the project owner shall develop and prepare a safety management plan focusing on the storage and handling of the hydrazine and the associated protective equipment requirements, handling techniques, personnel training, spill response procedures, detectors and alarms, as a minimum.

Verification: At least 45 days prior to startup of Units 5, 6, and 7, the project owner shall furnish a final copy of either the feasibility study or the hydrazine storage and handling management plan, as appropriate, to the CPM, CESFD and CMBFD. All initial

drafts shall be reviewed and commented upon by the CPM and CESFD. All final copies shall be approved by the CPM.

LAND USE

LAND-1 The project owner shall comply with the City of El Segundo Municipal Codes, including but not limited to:

1. minimum design and performance standards for the M2 Zone District;
2. parking standards; and,
3. outdoor advertising regulations.

Verification: Verification: At least 30 days prior to start of construction, the project owner shall submit to the CPM, written documentation, including evidence of review by the City of El Segundo that the project complies with the above codes, standards, and/or ordinances.

LAND-2 The project owner shall identify the secured lay down/staging area(s) for the project prior to site mobilization.

Verification: The project owner shall provide a plot plan and location map showing the lay down/staging area(s) to the local government of jurisdiction (i.e. County of Los Angeles, the City of El Segundo, City of Manhattan Beach, etc.) planning department and to the California Coastal Commission if located within the State designated Coastal Zone.

The local government of jurisdiction and the Executive Director of the California Coastal Commission if applicable shall have 30 calendar days to provide written comments to the CPM on the lay down/staging area(s) to review for approval.

If the project owner requires additional off-site lay down/staging area, the project owner shall file a request for an amendment to their permit with the CPM.

At least 30 days prior to the start of site mobilization, the project owner shall provide to the CPM for review and approval the secured lay down and staging area(s).

LAND-3 The project owner shall provide appropriate evidence of compliance with Federal Aviation Administration (FAA) regulations regarding the marking and/or lighting of the project's new exhaust stacks.

Verification: Pursuant to the schedule contained in Condition of Certification **TRANS-6,** the project owner shall submit copies of the FAA Form 7460-1 with copies of the FAA response to Form 7460-1 to the CPM.

LAND-4 The project owner shall either bore the proposed sewer line under 45th Street in the City of Manhattan Beach or use conventional excavation techniques using steel cover plates to allow traffic to have access to the Strand parking lot at all times. The time period necessary to complete the 45th Street sewer excavation/trenching and connection shall be kept to a minimum. The applicant shall obtain the required encroachment permit(s) from the local government of jurisdiction(s). The sewer line shall be constructed during the off-peak season.

Verification: The project owner shall submit to the City of Manhattan Beach Public Works Department an encroachment permit application for their review and approval and to the CPM for final approval. The permit application shall include a description of the method that would be used to complete any excavations in 45th Street. The application shall include the proposed time to begin and complete the sewer line connection. Also, the permit application shall illustrate how the construction crew and traffic control will ensure that access to the parking lot is not disrupted.

The project owner shall monitor the construction of the sewer line in the 45th Street right-of-way at all times and promptly notify the City of Manhattan Beach Public Works Department and CPM of any difficulties experienced.

Prior to any ground disturbance within the 45th Street public right-of-way a copy of the City of Manhattan Beach approved/issued encroachment permit shall be submitted to the CPM.

The CPM or City of Manhattan Beach designated representative may conduct random site visits to verify compliance, and the CPM may temporarily stop construction to ensure access is maintained.

LAND-5 The project owner shall provide written notification to the CPM when any plans for use of the abandoned fuel tank farm area (Parcel 2) are developed and indicate whether the project owner believes such plans are subject to the Energy Commission's permitting authority in accordance to the Warren-Alquist Act. The written notification shall include a description of the development and an analysis of which agency has proper jurisdiction over the development according to the enacted laws, ordinances and standards in effect at the time such development is to be proposed.

Verification: The project owner shall provide written notification to the planning departments of the City of El Segundo and the City of Manhattan Beach and to the Executive Director of the California Coastal Commission who shall have 30 calendar days to provide written comments to the CPM to review.

At least 60 days prior to submitting any building permit applications to any other agency for development of the abandoned fuel tank farm area (Parcel 2); the project owner shall provide a copy of the written notification to the CPM. The project owner shall also provide copies of the written notification sent to the Cities of El Segundo, Manhattan Beach and to the Executive Director of the California Coastal Commission to the CPM.

LAND–6: The abandoned fuel storage tanks on Parcel 2 shall be removed prior to the start of commercial operation of the new generating units. Any site remediation and/or soil restoration activities required by appropriate authorities shall be completed following tank removal.

Verification: The project owner shall submit a detailed schedule for the removal of the fuel storage tanks, site remediation and/or soil restoration to the CPM for review and approval prior to the start of construction.

LAND-7: The project owner shall provide copies of final grading and drainage plans to the planning departments of the Cities of El Segundo and Manhattan Beach.

Verification: Pursuant to the schedule contained in Condition of Certification **CIVIL-1** the project owner shall also submit copies of the proposed drainage structures and grading plan to the City of El Segundo planning department and the City of Manhattan Beach planning department concurrent with their submittal to the Chief Building Official (CBO) and CPM.

LAND-8: El Segundo Power LLC, is the lessee of PRC 858.1, involving tide and submerged lands under the jurisdiction of the California State Lands Commission (CSLC). That lease expired October 26, 2002. El Segundo Power LLC shall provide to the CPM a copy of a new lease executed with the California State Lands Commission. The new lease shall secure El Segundo Power LLC's long-term use of the seawater intake/outfall lines, including those that serve El Segundo Generating Station's Units 1 and 2. The new lease shall be executed prior to the start of commercial operation of the new generating units for the project.

Verification: El Segundo Power LLC has submitted an application requesting a new lease to the CSLC. El Segundo Power LLC has provided the CPM with a copy of the initially submitted application filed with the CSLC.

El Segundo Power II shall submit to the CPM a copy of the newly executed lease agreement with the CSLC, and any subsequent assignment of the newly executed lease that has been approved by the CSLC.

LAND–9: The project owner shall provide copies of the final perimeter landscape plan(s) to the CPM. Said landscape plans shall include the installation of public park type benches along the west property line of the ESGS property.

Verification: Pursuant to the schedule contained in Visual Resources Conditions of Certification, the project owner shall submit copies of the proposed perimeter landscaping plan to the City of El Segundo and the City of Manhattan Beach for review and comment and to the CPM for review and approval.

LAND-10: Project pre-construction and construction activity shall not prevent public use of the County maintained Class 1 bicycle path. The project owner shall maintain public access along the bicycle path that borders the El Segundo Generating Station.

The project owner shall repair any damage to the bicycle path that is caused by pre-construction and construction activities conducted for the project.

Verification: The project owner shall complete any repair to the bicycle path pursuant to the schedule contained in Visual Resources Condition of Certification **VIS-3**.

The CPM, the designated representative of the affected local jurisdiction(s) and the designated representative of the Coastal Commission may conduct random site visits to

verify compliance with the **LAND-12**. Also, the CPM will investigate filed complaints to ensure compliance.

NOISE

NOISE-1: At least 15 days prior to site mobilization, the project owner shall notify all residents, property owners, and business owners within one-half mile of the site, and the City of Manhattan Beach, the City of El Segundo, and L.A. County Lifeguard Headquarters, by mail and/or other effective means, of the commencement of project construction. At the same time, the project owner shall establish and disseminate a 24-hour "hotline" telephone number for use by the public to report any undesirable noise conditions associated with the construction of the project. This telephone number shall also be posted at the project site during construction in a manner visible to passersby. This telephone number shall be maintained until the project has been operational for at least one year. The telephone shall be located in an area that is likely to be staffed, and, if the telephone is not staffed 24 hours per day, the project owner shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended.

Verification: The project owner shall transmit to the CPM in the first Monthly Construction Report following site mobilization, a statement, signed by the project manager, attesting that the above notification has been performed, and describing the method of that notification. This statement shall also attest that the telephone number has been established and posted at the site.

NOISE-2: Throughout the construction and operation of the project, the project owner shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints as soon as possible.

- The project owner shall establish and disseminate a 24-hour "hotline" telephone number for use by the public to report any undesirable noise conditions associated with the project. The telephone shall be located in an area that is likely to be staffed, and, if the telephone is not staffed 24 hours per day, the project owner shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended.
- The project owner shall designate a noise monitoring officer for each construction shift, and for the daytime shift after the plant is placed into service. The noise monitoring officer shall be trained in the use of a sound level meter, and shall be empowered to halt any construction activities causing or likely to cause a violation of the Conditions of Certification herein. The noise monitoring officer shall carry at all times an operable portable electronic device (such as telephone or pager) to receive any incoming "hotline" call.
- The noise monitoring officer shall log each noise complaint on a CPM-approved complaint form and shall attempt to resolve the complaint.
- For construction noise complaints received outside of the construction hours and days allowed as described by Condition of Certification NOISE-8, the noise monitoring officer shall take immediate steps to determine whether power plant construction is causing the noise and, if so, to reduce the noise

level of that activity or take other appropriate action to remedy the complaint as quickly as possible (not to exceed one hour) in order to comply with the Conditions of Certification.

- For construction noise complaints, the noise monitoring officer shall contact the complainant within the hour, if requested by the complainant, with information on the status and resolution of the complaint.
- In the event of construction noise complaints for two consecutive periods outside of which construction is specifically allowed by NOISE-8, either from a single affected residence, from multiple residences, or businesses, the project owner shall monitor noise levels at the receptor(s) for no less than the following two consecutive periods.
- The noise monitoring officer, as appropriate, shall measure site fence-line noise levels, and/or measure noise levels at the complainant's property line, to assure compliance.
- The project owner shall attempt to contact the person(s) making a plant operations noise complaint within 24 hours, and shall conduct an investigation to determine the source of noise related to the complaint.
- If the noise is related to plant operations, the project owner shall take all feasible measures to reduce the noise at its source as soon as possible.
- If the noise complaint is not resolved to the satisfaction of the complainant, including the time frame for resolution, the noise monitoring officer shall provide the Commission's toll free compliance telephone number (1-800-858-0784 unless otherwise specified by the CPM).
- Within 24 hours of receiving a noise complaint, the project owner shall file a copy of the Noise Complaint Resolution Form, or similar instrument approved by the CPM, with the City of El Segundo and City of Manhattan Beach, and with the CPM, documenting the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a 3-day period, the project owner shall submit a progress report and a proposed mitigation schedule, subject to the approval of the CPM, to the CPM and the affected City within 5 days of receiving the complaint.
- Following resolution of the noise complaint, the project owner shall submit an updated Noise Complaint Resolution Form and a report to the CPM and the affected City documenting the complaint and the actions taken. The report shall include: a complaint summary, including final results of noise reduction efforts; and if obtainable, a signed statement by the complainant stating that the noise problem is resolved to the complainant’s satisfaction.

Verification: The project owner shall provide to the CPM, in the applicable Monthly and/or Annual Compliance Report, a listing of noise complaints received in that time period, and the status of resolution of each complaint, including all those which have not yet been resolved.

NOISE-3: Prior to site mobilization, the project owner shall submit to the CPM for review and approval a noise control program. The noise control program shall be used to reduce employee exposure to high noise levels during construction and also to comply with applicable OSHA and Cal-OSHA standards**.**

Verification: At least 30 days prior to site mobilization, the project owner shall submit to the CPM the above referenced program for review and approval. The project owner shall make the program available to OSHA upon request.

NOISE-4: A low-pressure continuous steam blow or other equivalent low-pressure process shall be employed. Prior to site mobilization, the project owner shall submit a description of this process, with expected noise levels and projected hours of execution, to the CPM, who shall review the proposal with the objective of ensuring that the resulting noise level does not exceed the nighttime ambient hourly L_{50} value determined in NOISE-6 plus 5 decibels at the nearest residential property line. Project owner shall strive to avoid nighttime steam blows. If nighttime low pressure steam blows are unavoidable, these low pressure steam blows shall not exceed nighttime ambient hourly L_{50} value determined in NOISE-6 plus 2 decibels at the nearest residential property line during the hours 6:00 p.m. to 7:30 a.m. Copies of the process description and predicted noise levels shall be provided to the Cities of Manhattan Beach and El Segundo.

Verification: At least 15 days prior to any low-pressure continuous steam blow, the project owner shall submit to the CPM drawings or other information describing the steam blow process, including the noise levels expected and the projected time schedule for execution of the process.

NOISE-5: At least 15 days prior to the first steam blow(s), the project owner shall notify the Cities of El Segundo and Manhattan Beach, L.A. County Lifeguard Headquarters, and all residents, property owners and business owners within one mile of the site of the planned steam blow activity, and shall make the notification available to other area residents in an appropriate manner. The notification may be in the form of letters to the area residences, telephone calls, fliers and/or other effective means. The notification shall include a description of the purpose and nature of the steam blow(s), the proposed schedule, the expected noise levels and potential hazards associated with them, the "hotline" phone number where people register complaints, and the explanation that it is a one-time operation and not a part of normal plant operations.

Verification: Within 5 days of notifying these entities, the project owner shall send a letter to the CPM confirming that there has been appropriate notification to the residents, property owners, Cities and businesses of the planned steam blow activities, including a description of the method(s) of that notification.

NOISE-6: The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that the project will not cause resultant noise levels to exceed the ambient median noise level (L_{50}) at residential receivers by 2 decibels or more, and that the noise due to plant operations will otherwise comply with the noise standards of the El Segundo and Manhattan Beach Municipal Codes.

No new pure tone components may be introduced. No single piece of equipment shall be allowed to stand out as a source of noise. Steam relief valves shall be adequately muffled.

A. Determine the ambient noise level (L_{50}) at Residential Receivers. Prior to site mobilization , the project owner shall prepare and submit to the City of El Segundo and City of Manhattan Beach for review and comment, and to the CPM for review and approval, a Pre-Construction Noise Survey Plan. This plan will indicate the survey procedure and methodology for establishing the ambient noise level at nearby residential receivers. At a minimum, the plan will include the following:

- The project owner will conduct a 30-day continuous community noise survey at a residential receptor (on 45th Street in Manhattan Beach), selected by the CPM in cooperation with the City of Manhattan Beach. This pre-construction survey shall be conducted during the period of June 1 to September 30. Hourly L_{eq}, L_{50} and L_{90} values shall be measured.
- Existing ESGS Units 3 and 4 shall be operating normally during the course of the survey, and the levels of plant operation will be documented during the survey. The plan will establish a range of acceptable ("normal") operating conditions suitable for the purposes of these studies.
- A simultaneous control measurement will be conducted within the project boundary. The site shall be selected to ensure that the dominant noise source will be the surf, requiring a clear line of sight to the surf. A location near the southwest project site corner is preferred to minimize the potential for noise from the existing power plant to influence the surf noise measurements. Wave height and other surf conditions, and any unusual environmental conditions occurring during the survey period shall be documented.
- For each of the days of noise data collected at each receptor, the arithmetic average median noise level (L_{50}) shall be computed for the quietest consecutive 4-hour period. The resultant average median noise levels shall then be averaged arithmetically to calculate the relationship between surf noise levels and ambient noise levels along the northern side of the El Porto Community.
- If the initial 30-day measurement data, in the judgment of the CPM in consultation with the City of Manhattan Beach, fail to demonstrate a consistent relationship of surf and ambient noise levels, the measurement will be repeated until a consistent relationship can be established.

  Following approval of the Survey Plan, and prior to site mobilization, the project owner shall implement the survey and present the results in a Pre-Construction Noise Survey Report to the Cities of El Segundo and Manhattan Beach and to the CPM. The Report will include a discussion of the ambient noise level taking into consideration all relevant factors, such as plant operating conditions, surf and wind conditions.

B. Conduct post-construction survey. As soon as feasible, within the time frame described below and after Units 5, 6 and 7 first achieve a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct short-term survey noise measurements at monitoring sites ST-1, ST-2, ST-3 and ST-12 (as described in the AFC, Section 5.12, Figure 5.12-3, as amended May 4, 2001). "In addition, the applicant shall conduct a 30-day community

noise survey at the same receptor locations used for the 30-day noise measurement cited in Section A above."

The post-project community noise survey shall be conducted between June 1 and September 30, using the methods described in Item A. above. The post-construction survey shall also include measurement of one-third octave band sound pressure levels at each of the above locations to ensure that no new pure-tone noise components have been introduced. If environmental conditions prevent completion of the post-construction community noise survey in a timely manner, then the survey shall be completed as soon as conditions allow.

Following the post-construction survey, the project owner shall present the results in a Post-Construction Noise Survey Report to the Cities of El Segundo and Manhattan Beach and to the CPM. The Report will include a discussion of the relationships between surf and ambient noise levels.

C. Implement Tank Removal Noise Mitigation if Required. Mitigation measures shall be implemented to reduce noise levels to a level of compliance if the results from the post-construction noise survey at the residential receptor location indicate that the ambient median noise level (L_{50}) has increased by 2 decibels or more due to facility operation, as determined by the relationship between surf and ambient noise levels obtained from the pre-construction survey. The project owner shall present the proposed mitigation measures to the Cities of El Segundo and Manhattan Beach and to the CPM.

D. Implement Pure Tone Mitigation if Required. If a facility-related pure tone is found to be present at any of the above monitoring sites, mitigation measures shall be implemented to eliminate the pure tone. For the purpose of this condition, a pure tone is defined by the State of California's Model Community Noise Control Ordinance. The project owner shall present the proposed mitigation measures to the Cities of El Segundo and Manhattan Beach and to the CPM.

E. Implement Plant Noise Mitigation if Required. If the results of noise measurements at ST-1, or ST-12 indicate that the ambient noise level has increased by more than 5 decibels due to facility operation, as compared with the baseline noise measurements conducted on July 20 and 21, 2000, the owner will implement mitigation measures to reduce the noise at those locations to comply with the Municipal Code of the City of El Segundo. The project owner shall present the proposed mitigation measures to the Cities of El Segundo and Manhattan Beach and to the CPM.

Verification:

1. Pre-Construction Survey and Determination of Ambient Noise Level.

    a) At least 60 days prior to site mobilization, the project owner shall provide the Pre-Construction Noise Monitoring Survey Plan to the CPM for review and approval.

b) Within 30 days of completion of the survey, the project owner shall provide to the CPM for review and approval the results of the pre-construction noise survey.

2. Post-construction Survey. Within 45 days after completing the post-construction surveys, the project owner shall submit a summary report of the survey to the CPM. Included in the report will be a description of any additional mitigation measures necessary to achieve compliance with the above listed noise limits, and a schedule, subject to CPM approval, for implementing these measures.

3. Mitigation Implementation. If mitigation is required, then upon completion of installation of these measures, the project owner shall submit to the CPM a summary report of a new noise survey, performed as described in paragraph B and showing compliance with this condition.

NOISE-7: Within 30 days of the project first achieving a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct an occupational noise survey to identify the noise hazardous areas in the facility. The survey shall be conducted by a qualified person in accordance with the provisions of Title 8, California Code of Regulations, sections 5095-5099 (Article 105) and Title 29, Code of Federal Regulations, section 1910.95. The survey results shall be used to determine the magnitude of employee noise exposure. The project owner shall prepare a report of the survey results and, if necessary, identify proposed mitigation measures that will be employed to comply with the applicable California and federal regulations.

Verification: Within 30 days after completing the survey, the project owner shall submit the noise survey report, including proposed mitigation measures, to the CPM for review and approval. The project owner shall make the report available to OSHA and Cal-OSHA upon request.

NOISE-8: Heavy equipment operation and noisy construction or demolition work shall be restricted beginning at site mobilization as described below.

No pure tones are allowed outside of the hours of 7:30 A.M. to 6:00 P.M. Monday-Friday, and 9:00 A.M. to 6:00 P.M. Saturday. Haul trucks and other engine-powered equipment shall be equipped with adequate mufflers. Haul trucks shall be operated in accordance with posted speed limits. Truck engine exhaust brake use shall be limited to emergencies.

Tank Farm Area: Noise levels at any residential property line due to tank farm construction or demolition shall be limited to the average daytime hourly ambient L_{50} value plus 5 dBA, or 65 dBA L_{50}, whichever is lower for continuous noise and for intermittent noise (up to 30 minutes in one hour) the maximum noise levels shall be ambient plus 10 dBA). Haul trucks and other engine-powered equipment shall be equipped with adequate mufflers. Haul trucks shall be operated in accordance with posted speed limits. Truck engine exhaust brake use shall be limited to emergencies.

The use of the tank farm area is divided into four phases. For each phase the following restrictions shall be observed. Construction activity outside the hours described will not be allowed in the area south of the southern tank, which shall be termed the nighttime exclusion area. (See attached map.)

Phase I: Prepare the tank farm for use during demolition and construction: cutting openings into the sides of the tanks, use of grader, backhoe and small trucks, a few truck trips to remove material, some welding, installation of landscaping and irrigation. All demolition and construction will occur during daytime hours of 7:30 AM to 6:00 PM Monday - Friday and 9:00 AM to 6:00 PM on Saturdays. No demolition or construction shall occur on Sundays or holidays.

Phase II: Demolition period: Entering and exiting the site, hauling material. Construction activities shall avoid the southerly end of the tank farm. All construction activities will be restricted to 7:30 AM to 6:00 PM. During the hours 5:00PM to 9:00AM, the nighttime exclusion area may be accessed by passenger vehicles or pedestrians to inspect tanks. . Except as further restricted above, all demolition and construction shall occur between 7:30 AM to 6:00 PM Monday - Friday and 9:00 AM to 6:00 PM on Saturdays. No demolition or construction shall occur on Sundays or holidays.

Phase III: Construction period: Haul material into and out of the area; remove the north tank. Daytime activities will be shielded from 45th street residents by the use of the south tank as a dome and as a shield. All demolition and construction shall occur between 7:30 AM to 6:00 PM Monday - Friday and between 9:00 AM to 6:00 PM on Saturdays. No demolition or construction shall occur on Sundays or holidays.

Phase IV: Operations period: Remove the south tank, and limit the traffic on the tank farm area. During daytime only, metal cutting will be allowed from 9:00 AM to 5:00 PM Monday through Friday, except holidays. During daytime only, trucks may be used to remove tank material and to remove soil. Bulldozers, graders etc. may be used during daytime hours only to move, excavate and replace soil. All demolition and construction shall only occur between 7:30 AM and 6:00 PM Monday-Friday. No demolition or construction shall occur on Saturdays, Sundays or holidays.

Other Areas of the Project Site: The noise standards for construction and demolition occurring at the rest of the project site (with the exception of the tank farm area) shall be:

- 65 dBA hourly L_{50} at any residential receptor during the hours of 7:30 A.M. to 6:00 P.M. Monday-Friday, and 9:00 A.M. to 6:00 P.M. Saturday.
- The ambient hourly L_{50} value plus 2 dBA at any residential receptor at any other time.

Ambient noise levels shall be determined from the pre-construction survey conducted pursuant to **NOISE-6.**

Verification: The project owner shall transmit to the CPM in the first Monthly Construction Report a statement acknowledging that the above restrictions will be observed throughout the construction of the project.

NOISE-9: The project design and implementation shall ensure that site mobilization, demolition, construction, or operation of the power plant will not cause vibration at any sensitive receptor to exceed a peak particle velocity of 0.003 in/sec, or to cause vibration which is perceptible without use of instruments to any reasonable person of normal sensitivity.

The noise monitoring officer designated pursuant to Condition of Certification **NOISE-1** shall log each construction vibration complaint on a CPM-approved complaint form and attempt to resolve the complaint. For construction vibration complaints received outside of the construction hours or days allowed as described by Condition of Certification NOISE-8, the noise monitoring officer shall take immediate steps to determine whether power plant construction is causing the vibration and, if so, to reduce the vibration level of that activity as quickly as possible (not to exceed one hour) in order to comply with the Conditions of Certification. The noise monitoring officer, as appropriate, shall measure site fence-line vibration levels to assure compliance. If the vibration complaint is not resolved to the satisfaction of the complainant, including a time frame for resolution, the noise monitoring officer shall provide the Commission's toll free compliance telephone number (1-800-858-0784, unless otherwise specified by the CPM).

In the event of construction-related vibration complaints either from a single affected residence, from multiple residences, or businesses, the project owner shall monitor vibration at the receptor(s) for no less than the following two days of construction .

Within 24 hours of receiving a complaint for vibration, the project owner shall file a copy of the Noise Complaint Resolution Form, or similar instrument approved by the CPM, with the City of El Segundo and/or City of Manhattan Beach, and with the CPM. If mitigation is required to resolve a complaint, and the complaint is not resolved within a 3-day period, the project owner shall submit a progress report and a proposed mitigation schedule, subject to the approval of the CPM, to the CPM and the affected City within 5 days of receiving the complaint. The project owner shall submit an updated Noise Complaint Resolution Form to the CPM and the affected City when the mitigation is finally implemented.

Verification: The project owner shall provide, in the applicable Monthly and/or Annual Compliance Report, a listing of vibration complaints received in that time period, and the status of resolution of each complaint, including all those which have not yet been resolved.

NOISE-10: The loudspeaker system shall be allowed for emergency use only, and for testing of the system.

Verification: The project owner shall transmit to the CPM in the first Monthly Construction Report a statement acknowledging that the above restrictions will be observed throughout the construction and operation of the project.

SOCIOECONOMICS

SOCIO-1: Prior to any ground disturbance activities, the project owner shall prepare a fiscal impact analysis for the project that includes analysis of the actual revenues and costs associated with the project. The revenue analysis shall include an analysis of the total property tax, franchise tax, utility user tax, sales and use tax, business license fees, building permit fees, and other revenues generated by the facility as identified in the City of El Segundo's Fiscal Impact Model. The cost analysis shall include a discussion of the cost to City services (i.e., police, fire, public works) for ongoing service to the project. The fiscal impact analysis shall compare the revenue and costs over a minimum period of five years following the start of commercial operations.

Verification: At least 30 days prior to any ground disturbance activities, the project owner shall transmit the analysis to the City of El Segundo for review and comment and to the Energy Commission Compliance Project Manager (CPM) for review and approval.

SOCIO-2: Prior to the start of commercial operations, the project owner shall pay the City of El Segundo the following one-time fees:

- police service mitigation fee of $0.11 per gross square foot of building area
- fire service mitigation fee of $0.14 per gross square foot of building area.
- library service mitigation fee of $0.03 per gross square foot of building area.
- traffic mitigation fee for new development, in an amount to be determined by the City of El Segundo Public Works Director upon receipt of a Traffic Mitigation Fee Determination Form.

The gross square foot of building area and the amount of the one-time fees shall be determined by the City of El Segundo at the time the project owner submits the site plans.

Verification: Prior to the start of commercial operations, the project owner shall submit verification to the CPM that the required mitigation fees have been paid to the City of El Segundo.

The project owner shall provide proof of payment of the Traffic Mitigation Fee in the next Monthly Compliance Report following payment.

SOIL AND WATER RESOURCES

SOIL & WATER 1: Prior to site mobilization, demolition, and/or construction related ground disturbance activities, including linear facilities, the project owner shall develop a Storm Water Pollution Prevention Plan (SWPPP) for the project as required under the NPDES General Stormwater Construction Activity Permit. A copy of the SWPPP and the Notice of Intent (NOI) submitted to the LARWQCB as required under the NPDES General Stormwater Construction Activity Permit regulations shall be provided to the CPM for review and approval. The SWPPP shall include the actual drainage and facility design for all on- and off-site ESPR project facilities for construction, and shall be designed according to the most recent applicable guidelines and checklists set forth by the State Water Resources Control Board Division of Water Quality. The SWPPP shall demonstrate compliance with all applicable SUSUMP requirements. The project owner shall submit the construction SWPPP to the City of El Segundo for review and comment, and provide the CPM with a copy of a transmittal letter that requests the City provide copies of their comments to both the project owner and to the CPM.

Verification: Sixty days prior to the start of any site mobilization activities and/or ground disturbing activities associated with demolition or construction of the project (including demolition of tanks or Units 1 and 2) or any linear element, the project owner shall submit copies of the construction SWPPP, the NOI, and the transmittal letter to the CPM for review and approval. The SWPPP must be approved, and the transmittal letter and NOI copies received by the CPM prior to the start of site mobilization activities**.**

SOIL & WATER 2: Prior to site mobilization, demolition, and/or construction related ground disturbance activities, including linear facilities, the project owner shall develop an Erosion and Sedimentation Control Plan (ESCP) for the construction phase of the project. A copy of the ESCP for construction shall be provided to the CPM for review and approval. The ESCP shall address the actual drainage and facility design for all on- and off-site ESPR project facilities for construction, and shall address all issues detailed in the Staff Recommended Mitigation section of this FSA. The ESCP shall demonstrate compliance will all applicable SUSUMP requirements. The project owner shall submit the construction ESCP to the City of El Segundo for review and comment, and provide the CPM with a copy of a transmittal letter that requests the City provide copies of their comments to both ESPR and to the CPM.

Verification: Sixty days prior to the start of any site mobilization activities and/or ground disturbing activities associated with demolition or construction of the project or any linear element, the project owner shall submit the ESCP and a copy of the transmittal letter to the CPM for review and approval. The ESCP must be approved, and the transmittal letter received by the CPM prior to the start of site mobilization activities**.**

SOIL & WATER 3: Prior to power plant operation the owner shall develop a SWPPP as required under the NPDES stormwater discharge permit for operation of the

project. The SWPPP shall include the actual drainage and facility design for all on- and off-site ESPR project and linear facilities showing the details of the stormwater and sediment run-off and run-on to the ESPR project facilities during operation. The SWPPP shall be designed according to most recent guidelines and checklists set forth by the State Water Resources Control Board Division of Water Quality. This plan shall document that the existing and proposed project stormwater facilities have adequate capacity as required by the City of El Segundo. The SWPPP shall be consistent with all other permit and design documents, and shall demonstrate compliance with all applicable SUSUMP requirements. The project owner shall include in this plan the installation of secondary containment for the entire site, excluding off-site and linear facilities. The containment design shall have design documentation and specifications for the berms or other walled structures. The project owner shall submit the operational SWPPP to the City of El Segundo for review and comment, and provide the CPM with a copy of a transmittal letter that requests the City provide copies of their comments to both the project owner and to the CPM. The operational SWPPP shall be approved, and the transmittal letter received by the CPM prior to the start of operation.

Verification: Sixty days prior to the start of operation the project owner shall submit copies of the SWPPP and the transmittal letter to the CPM for review and approval. The SWPPP must be approved, and the transmittal letter received by the CPM prior to power plant operation.

SOIL & WATER 4: Prior to power plant operation the owner shall develop an Erosion and Sedimentation Control Plan (ESCP) for the operational phase of the project. The ESCP shall include the actual drainage and facility design for all on- and off-site ESPR project and linear facilities showing all of the details of stormwater and sediment run-off and run-on to the ESPR project facilities during operation. The ESCP shall address all issues detailed in the Staff Recommended Mitigation section of this FSA. The ESCP shall be consistent with all other permit and design documents, and shall demonstrate compliance with all applicable SUSUMP requirements. The project owner shall include in this plan the installation of secondary containment for the entire site, excluding off-site and linear facilities. The containment design shall have design documentation and specifications for the berms or other walled structures. The project owner shall submit the operational ESCP to the City of El Segundo for review and comment, and provide the CPM with a copy of a transmittal letter that requests the City provide copies of their comments to both ESPR and to the CPM. The operational ESCP shall be approved, and the transmittal letter received by the CPM prior to the start of operation.

Verification: Sixty days prior to the start of operation the project owner shall submit a copies of the ESCP and the transmittal letter to the CPM for review and approval. The ESCP must be approved, and the transmittal letter received by the CPM prior to power plant operation.

SOIL & WATER 5: The project owner shall maintain in effect the National Pollutant Discharge Elimination System (NPDES) Permit from the LARWQCB for the life of the ESPR project. The project owner shall comply with all provisions of the NPDES Permit, and shall notify the CPM of any proposed or actual changes

made to this permit and provide copies of materials related to permit amendment, modification, and renewal, and of any changes to the project design or operational plan necessary to comply with the NPDES permit changes. All exceedances, permit violations, and enforcement actions shall be reported and discussed in the annual Compliance Report to the CPM. All NPDES enforcement actions against the project shall be reported to the CPM by letter within 30-days of the project being notified by LARWQCB. The project shall not operate without the NPDES permit in place.

Verification: Within 30 days following receipt of a new, amended, or modified NPDES Permit from the LARWQCB, the project owner shall submit a copy of the new permit to the CPM. The Annual Compliance report shall include a copy of NPDES compliance monitoring reports submitted to the LARWQCB, reporting NPDES permit exceedances, violations, and enforcement actions taken against the project owner, and a discussion of the measures taken by the project owner to bring the project into compliance with the NPDES permit. The CPM shall be notified by letter of NPDES permit enforcement actions within 30-days of the project being notified by the LARWQCB. The project owner shall notify the CPM in writing of any changes made to this permit, and of any changes to the project design or operational plan necessary to comply with NPDES permit revisions.

SOIL & WATER 6: The project owner shall use reclaimed water for all in-plant process water needs, except those specifically excluded uses, unless it can be demonstrated that its use is not compatible with any particular use. Specifically excepted from using reclaimed water are fire control water, sanitary water, potable water, and once through cooling water. The project owner shall submit a Reclaimed Water Use Plan (RWUP) that includes a detailed revised project design, operational plan, water balance, and heat balance for the use of reclaimed water for review and approval by the CPM prior to the start of any site mobilization activities for the project or any linear element. This RWUP shall be consistent with all applicable LORS, including Title 22 California Code of Regulations.

Any in-plant water needs that the project owner claims can not be met using reclaimed water, other than those specifically excepted, shall be identified and a discussion of the infeasibility of reclaimed water use for these needs shall be included in the RWUP for review and approval by the CPM. Site mobilization activities shall not begin without a CPM approved RWUP.

Verification: The project owner shall submit the RWUP to the CPM for review and approval sixty days prior to the start of any site mobilization activities associated with the project or any linear elements. The RWUP must be approved by the CPM before the start of site mobilization.

SOIL & WATER 7: The project owner shall perform quarterly sampling of the retention pond and provide analytical data summary reports consistent with those required by the NPDES permit in the Annual Compliance Report to the CPM. These samples shall be collected and analyzed for parameters consistent with the NPDES permit monitoring requirements for the retention pond, and all exceedances and violations, and actions taken to avoid their reoccurrence shall be discussed in detail.

Verification: The quarterly reporting and discussion shall be included in the Annual Compliance Report to the CPM for the life of the project.

SOIL & WATER 8: Only potable water from the City of El Segundo or recycled water from the West Basin Municipal Water District shall be used by the project for uses other than once-through cooling. The process water supply shall be reclaimed water. A backup water supply has not been included in the project design or operational plan, and the project shall not operate during periods when reclaimed or other water is not available in sufficient quantities from the primary supply sources. The project owner shall report the periods of non-operation due to unavailability of water from any source in the Annual Compliance Report.

The project owner shall install on-site metering and recording devices and record on a monthly basis all water used by the ESPR, except water used for once-through cooling, including the amount of reclaimed, and non-reclaimed water used by the project, with the source and amount of all reclaimed and non-reclaimed water identified. The annual summary shall include the monthly range, monthly average, and total amounts of reclaimed and non-reclaimed water identified by amount and source used by the project in both gallons-per-minute and acre-feet. Following the first year of operation the annual summary shall also include the yearly range and yearly average of reclaimed and non-reclaimed water identified by amount and source used by the project. This information shall be supplied to the CPM in the Annual Compliance Report for review and approval for the life of the project.

Verification: No less than 60 days prior to the start of operation of ESPR, the project owner shall submit to the CPM evidence that metering devices have been installed and are operational on the pipelines serving and within the project. These metering devices shall be capable of recording the quantities in gallons of water delivered to ESPR and differentiate between uses of these supplies by ESPR in order to report water demand. The project owner shall provide a report on the servicing, testing and calibration of the metering devices and operation in the annual compliance report. The project owner shall submit the required water use summary to the CPM for review as part of the Annual Compliance Report for the life of the project.

TRAFFIC AND TRANSPORTATION

TRANS-1: The project owner shall comply with Caltrans and other relevant jurisdictions' limitations on vehicle sizes and weights. In addition, the project owner or its contractor shall obtain necessary transportation permits from Caltrans and all relevant jurisdictions for roadway use.

Verification: In the Monthly Compliance Reports, the project owner shall submit copies of any permits received during that reporting period. In addition, the project owner shall retain copies of these permits and supporting documentation in its compliance file for at least six months after the start of commercial operation.

TRANS-2: The project owner or its contractor shall comply with Caltrans and other relevant jurisdictions' limitations for encroachment into public rights-of-way and shall obtain necessary encroachment permits from Caltrans and all relevant jurisdictions.

Verification: In Monthly Compliance Reports, the project owner shall submit copies permits received during the reporting period. In addition, the project owner shall retain copies of these permits and supporting documentation in its compliance file for at least six months after the start of commercial operation.

TRANS-3: The project owner shall ensure that permits and/or licenses are secured from the California Highway Patrol and Caltrans for the transport of hazardous materials.

Verification: The project owner shall include in its Monthly Compliance Reports, copies of all permits/licenses acquired by the project owner and/or subcontractors concerning the transport of hazardous substances.

TRANS-4: During construction of the power plant and all related facilities, the project shall develop a parking and staging plan for all phases of project construction to enforce a policy that all project-related parking occurs on-site or in designated off-site parking areas.

Verification: At least 60 days prior to start of site mobilization, the project owner shall submit the plan to the City of El Segundo and other jurisdictions affected by site selection, such as the City and/or County of Los Angeles for review and comment, and to the CPM for review and approval.

TRANS-5: The project owner shall consult with the Cities of El Segundo, Manhattan Beach and Los Angeles, and prepare and submit to the CPM for approval a construction traffic control plan and implementation program which addresses, at a minimum, the following issues:

- Timing of heavy equipment and building materials deliveries;
- Redirecting construction traffic with a flagperson;
- Signing, lighting, and traffic control device placement if required;

- Need for construction work hours and arrival/departure times outside of peak traffic periods;
- Ensure access for emergency vehicles to the project site;
- Temporary travel lane closure;
- Access to adjacent residential and commercial property during the construction of all linears;
- Specify construction related haul routes; and,
- Identify safety procedures for exiting and entering the site access gate.

Verification: At least 30 days prior to site mobilization, the project owner shall provide to the CPM a copy of the referenced documents.

TRANS-6: The HRSG stacks shall have all the lighting and marking required by the Federal Aviation Authority (FAA) so that the stacks do not create a hazard to air navigation.

The project owner shall submit to the FAA Form 7460-1, Notice of Proposed Construction or Alteration and supporting documents on how the project plans to comply with stack lighting and marking requirements imposed by the FAA.

Verification: At least 30 days prior to the start of construction, the project owner shall provide copies of the FAA Form 7460-1 with copies of the FAA response to Form 7460-1, to the CPM and the City of El Segundo Planning Department.

TRANS-7: Following completion of ESPR project construction, the applicant shall repair any damage to the segment of Vista Del Mar and other roadways affected by linear construction activity along with the primary roadways identified in the traffic control plan for construction traffic to the road's pre-project construction condition.

Prior to start of construction, the project owner shall photograph, videotape or digitally record images of Vista Del Mar and the roadways that will be affected by linear construction and heavy construction traffic. The project owner shall provide the Compliance Project Manager (CPM), and the Cities of El Segundo, Manhattan Beach and Los Angeles with a copy of the images for the roadway segments under their jurisdiction. Prior to start of construction, the project owner shall also notify the Cities of El Segundo, Manhattan Beach and Los Angeles about the schedule for project construction. The purpose of this notification is to postpone any planned roadway resurfacing and/or improvement projects until after the project construction has taken place and to coordinate construction related activities associated with other projects.

Verification: Within 30 days after completion of the redevelopment project, the project owner shall meet with the CPM and the Cities of El Segundo, Manhattan Beach, and Los Angeles to determine and receive approval for the actions necessary and schedule to complete the repair of identified sections of public roadways to original or as near original condition as possible. Following completion of any regional road improvements, the project owner shall provide to the CPM a letter from the Cities of El Segundo, Manhattan Beach and Los Angeles if work occurred within their jurisdictional public right of way stating their satisfaction with the road improvements.

TRANSMISSION LINE SAFETY AND NUISANCE

TLSN-1: The project owner shall ensure that the proposed on-site replacement lines (associated with Units, 5, 6, and 7) are designed and constructed in compliance with CPUC's GO-95, GO-52, Title 8, Section 2700 Sections 2700 through 2974 of the California Code of Regulations and SCE's EMF-reduction guidelines arising from CPUC Decision 93-11-013.

Verification: Thirty days before the start of line construction, the project owner shall submit to the Commission's Compliance Project Manager (CPM) evidence of their intention to comply with the above requirements.

TLSN-2: The project owner shall ensure that a qualified individual is engaged to measure the strengths of the project-related electric and magnetic in the post-modification period. Measurements should be made at the same points along the perimeter of the SCE Switchyard, within the route of the on-site replacement lines, and the route of the existing off-site SCE lines, for which field strength values were presented by the applicant.

Verification: The project owner shall ensure that the post-modification measurements are tabulated together with the pre-modification measurements presented by the applicant. A copy of these measurement results shall be filed with the CPM within 60 days after completion of the measurements.

TLSN-3: Thirty days prior to the start of commercial operations**,** the project owner shall send written notice to all property owners and residents in the City of Manhattan Beach within 1,000 feet of transmission lines between the El Segundo Generating Station and the El Nido Substation of the possible interference impacts associated with the project and procedures for reporting complaints. The project owner shall make every reasonable effort to identify and correct, on a case-specific basis, all complaints of interference with radio or television signals from operation of transmission lines and related facilities. In addition to any transmission repairs, the relevant corrective actions should include, but shall not be limited to, adjusting or modifying receivers, adjusting or repairing, replacing or adding antennas, antenna signal amplifiers, filters, or lead-in cable.

The project owner shall maintain written records for a period of five years, of all complaints of radio or television interference attributable to operation together with the corrective action taken in response to each compliant. All complaints shall be recorded to include notations on the corrective action taken. Complaints not leading to a specific action or for which there was no resolution should be noted and explained. The record shall be signed by the project owner and also the complaint, if possible, to indicate concurrence with the corrective action or agreement with the justification for a lack of action.

Verification: All reports of line-related complaints shall be summarized and included in the Annual Compliance Report to the CPM.

TRANSMISSION SYSTEMS ENGINEERING

TSE-1: The project owner shall furnish to the CPM and to the CBO a schedule of transmission facility design submittals, a Master Drawing List, a Master Specifications List, and a Major Equipment and Structure List. The schedule shall contain a description and list of proposed submittal packages for design, calculations, and specifications for major structures and equipment. To facilitate audits by Energy Commission staff, the project owner shall provide designated packages to the CPM when requested.

Verification: At least 60 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of construction, the project owner shall submit the schedule, a Master Drawing List, and a Master Specifications List to the CBO and to the CPM. The schedule shall contain a description and list of proposed submittal packages for design, calculations, and specifications for major structures and equipment (see a list of major equipment in **Table 1: Major Equipment List** below). Additions and deletions shall be made to the table only with CPM and CBO approval. The project owner shall provide schedule updates in the Monthly Compliance Report.

Table 1: Major Equipment List
Breakers
Step-up Transformer
Switchyard
Busses
Surge Arrestors
Disconnects
Take off facilities
Electrical Control Building
Switchyard Control Building
Transmission Pole/Tower
Grounding System

TSE-2: Prior to the start of construction the project owner shall assign an electrical engineer and at least one of each of the following to the project: A) a civil engineer; B) a geotechnical engineer or a civil engineer experienced and knowledgeable in the practice of soils engineering; C) a design engineer, who is either a structural engineer or a civil engineer fully competent and proficient in the design of power plant structures and equipment supports; or D) a mechanical engineer. (Business and Professions Code Sections 6704 et seq., require state registration to practice as a civil engineer or structural engineer in California.)

The tasks performed by the civil, mechanical, electrical or design engineers may be divided between two or more engineers, as long as each engineer is responsible for a particular segment of the project (e.g., proposed earthwork, civil structures, power plant structures, equipment support). No segment of the project shall have more than one responsible engineer. The transmission line may be the responsibility of a separate California registered electrical engineer. The civil, geotechnical or civil and design engineer assigned in conformance with

Facility Design condition **GEN-5**, may be responsible for design and review of the TSE facilities.

The project owner shall submit to the CBO for review and approval, the names, qualifications and registration numbers of all engineers assigned to the project. If any one of the designated engineers is subsequently reassigned or replaced, the project owner shall submit the name, qualifications and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer. This engineer shall be authorized to halt earthwork and to require changes; if site conditions are unsafe or do not conform with predicted conditions used as a basis for design of earthwork or foundations.

The electrical engineer shall:

1. Be responsible for the electrical design of the power plant switchyard, outlet and termination facilities; and
2. Sign and stamp electrical design drawings, plans, specifications, and calculations.

Verification: At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval, the names, qualifications and registration numbers of all the responsible engineers assigned to the project. The project owner shall notify the CPM of the CBO's approvals of the engineers within five days of the approval.

If the designated responsible engineer is subsequently reassigned or replaced, the project owner has five days in which to submit the name, qualifications, and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.

TSE-3: If any discrepancy in design and/or construction is discovered in any engineering work that has undergone CBO design review and approval, the project owner shall document the discrepancy and recommend corrective action. (1998 CBC, Chapter 1, Section 108.4, Approval Required; Chapter 17, Section 1701.3, Duties and Responsibilities of the Special Inspector; Appendix Chapter 33, Section 3317.7, Notification of Noncompliance]. The discrepancy documentation shall become a controlled document and shall be submitted to the CBO for review and approval and shall reference this condition of certification.

Verification: The project owner shall submit a copy of the CBO's approval or disapproval of any corrective action taken to resolve a discrepancy to the CPM within 15 days of receipt. If disapproved, the project owner shall advise the CPM, within five days, the reason for disapproval, and the revised corrective action required to obtain the CBO's approval.

TSE-4: For the power plant switchyard, outlet line and termination, the project owner shall not begin any increment of construction until plans for that increment have been approved by the CBO. These plans, together with design changes and

design change notices, shall remain on the site for one year after completion of construction. The project owner shall request that the CBO inspect the installation to ensure compliance with the requirements of applicable LORS. The following activities shall be reported in the Monthly Compliance Report:

a) receipt or delay of major electrical equipment;
b) testing or energization of major electrical equipment; and
c) the number of electrical drawings approved, submitted for approval, and still to be submitted.

Verification: At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of each increment of construction, the project owner shall submit to the CBO for review and approval the final design plans, specifications and calculations for equipment and systems of the power plant switchyard, outlet line and termination, including a copy of the signed and stamped statement from the responsible electrical engineer attesting to compliance with the applicable LORS, and send the CPM a copy of the transmittal letter in the next Monthly Compliance Report.

TSE-5: The project owner shall ensure that the design, construction and operation of the proposed transmission facilities will conform to all applicable LORS, including the requirements listed below. The substitution of CPM and CBO approved "equivalent" equipment and equivalent substation configurations is acceptable. The project owner shall submit the required number of copies of the design drawings and calculations as determined by the CBO.

a) The power plant switchyard and outlet line shall meet or exceed the electrical, mechanical, civil and structural requirements of CPUC General Order 95 or National Electric Safety Code (NESC), Title 8 of the California Code and Regulations (Title 8), Articles 35, 36 and 37 of the "High Voltage Electric Safety Orders", National Electric Code (NEC) and related industry standards.

b) Breakers and busses in the power plan switchyard and other switchyards, where applicable, shall be sized to comply with a short-circuit analysis.

c) Outlet line crossings and line parallels with transmission and distribution facilities shall be coordinated with the transmission line owner and comply with the owner's standards.

d) The project conductors shall be sized to accommodate the full output from the project.

e) Termination facilities shall comply with applicable SGD&E interconnection standards.

f) The project owner shall provide:

   i) The final Detailed Facility Study (DFS) including a description of facility upgrades, operational mitigation measures, and/or Special Protection System (SPS) sequencing and timing if applicable,
   ii) Executed Facility Interconnection Agreement
   iii) Verification of Cal-ISO Notice of Synchronization.

Verification: At least 60 days prior to the start of construction of transmission facilities (or a lessor number of days mutually agree to by the project owner and CBO), the project owner shall submit to the CBO for approval:

a) Design drawings, specifications and calculations conforming with CPUC General Order 95 or NESC, Title 8, Articles 35, 36 and 37 of the "High Voltage Electric Safety Orders", NEC, applicable interconnection standards and related industry standards, for the poles/towers, foundations, anchor bolts, conductors, grounding systems and major switchyard equipment.

b) For each element of the transmission facilities identified above, the submittal package to the CBO shall contain the design criteria, a discussion of the calculation method(s), a sample calculation based on "worst case conditions"[1] and a statement signed and sealed by the registered engineer in responsible charge, or other acceptable alternative verification, that the transmission element(s) will conform with CPUC General Order 95 or NESC, Title 8, California Code of Regulations, Articles 35, 36 and 37 of the, "High Voltage Electric Safety Orders", NEC, applicable interconnection standards, and related industry standards.

c) Electrical one-line diagrams signed and sealed by the registered professional electrical engineer in responsible charge, a route map, and an engineering description of equipment and the configurations covered by requirements **TSE-5** a) through f) above.

d) The DFS operational mitigation measures, SPS, and executed Facility Interconnection Agreement shall be provided concurrently to the CPM and CBO. Substitution of equipment and substation configurations shall be identified and justified by the project owner for CBO approval.

TSE-6: The project owner shall inform the CPM and CBO of any impending changes, which may not conform to the requirements **TSE-5** a) through f), and have not received CPM and CBO approval, and request approval to implement such changes. A detailed description of the proposed change and complete engineering, environmental, and economic rationale for the change shall accompany the request. Construction involving changed equipment or substation configurations shall not begin without prior written approval of the changes by the CBO and the CPM.

Verification: At least 60 days prior to the construction of transmission facilities, the project owner shall inform the CBO and the CPM of any impending changes which may not conform to requirements of **TSE-5** and request approval to implement such changes.

TSE-7: The project owner shall provide the following Notice to the California Independent System Operator (Cal-ISO) prior to synchronizing the facility with the California Transmission system:

1. At least one week prior to synchronizing the facility with the grid for testing, provide the Cal-ISO a letter stating the proposed date of synchronization; and

[1] Worst case conditions for the foundations would include for instance, a dead-end or angle pole.

2. At least one business day prior to synchronizing the facility with the grid for testing, provide telephone notification to the ISO Outage Coordination Department.

Verification: The project owner shall provide copies of the Cal-ISO letter to the CPM when it is sent to the Cal-ISO one week prior to initial synchronization with the grid. The project owner shall contact the Cal-ISO Outage Coordination Department, Monday through Friday, between the hours of 0700 and 1530 at (916) 351-2300 at least one business day prior to synchronizing the facility with the grid for testing. A report of conversation with the Cal-ISO shall be provided electronically to the CPM one day before synchronizing the facility with the California transmission system for the first time.

TSE-8: The project owner shall be responsible for the inspection of the transmission facilities during and after project construction, and any subsequent CPM and CBO approved changes thereto, to ensure conformance with CPUC GO-95 or NESC, Title 8, CCR, Articles 35, 36 and 37 of the, "High Voltage Electric Safety Orders", applicable interconnection standards, NEC and related industry standards. In case of non-conformance, the project owner shall inform the CPM and CBO in writing, within 10 days of discovering such non-conformance and describe the corrective actions to be taken.

Verification: Within 60 days after first synchronization of the project, the project owner shall transmit to the CPM and CBO:

a) "As built" engineering description(s) and one-line drawings of the electrical portion of the facilities signed and sealed by the registered electrical engineer in responsible charge. A statement attesting to conformance with CPUC GO-95 or NESC, Title 8, California Code of Regulations, Articles 35, 36 and 37 of the, "High Voltage Electric Safety Orders", and applicable interconnection standards, NEC, related industry standards, and these conditions shall be provided concurrently.

b) An "as built" engineering description of the mechanical, structural, and civil portion of the transmission facilities signed and sealed by the registered engineer in responsible charge or acceptable alternative verification. "As built" drawings of the mechanical, structural, and civil portion of the transmission facilities shall be maintained at the power plant and made available, if requested, for CPM audit as set forth in the "Compliance Monitoring Plan".

c) A summary of inspections of the completed transmission facilities, and identification of any nonconforming work and corrective actions taken, signed and sealed by the registered engineer in charge.

WASTE MANAGEMENT

WASTE-1: The project owner and, if necessary, its construction contractor, shall each obtain a hazardous waste generator identification number from the Department of Toxic Substances Control prior to generating any hazardous waste.

Verification: The project owner shall notify the CPM via the monthly compliance report of its receipt and keep a copy of the identification number on file at the project site.

WASTE-2: Upon becoming aware of any impending waste management-related enforcement action by any local, state, or federal authority, the project owner shall notify the CPM of any such action taken or proposed to be taken against the project itself, or against any waste hauler or disposal facility or treatment operator with which the owner contracts.

Verification: The project owner shall notify the CPM in writing within 10 days of becoming aware of an impending enforcement action. The CPM shall notify the project owner of any changes that will be required in the manner in which project-related wastes are managed.

WASTE-3: Prior to the start of both site mobilization and commercial operation, the project owner shall prepare and submit to the CPM for review and approval, and to local agencies, if applicable, for review and comment, a waste management plan for all wastes generated during construction and operation of the facility, respectively. The plans shall contain, at a minimum, the following:

- A description of all waste streams, including projections of frequency, amounts generated and hazard classifications; and
- Methods of managing each waste, including storage, treatment methods and companies contracted with for treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/reduction plans.

Verification: At least 60 days prior to the start of site mobilization, the project owner shall submit the construction waste management plan to local agencies, if applicable, for review and comment, and to the CPM for review and approval. The operation waste management plan shall be submitted no less than 60 days prior to the start of commercial operation. The project owner shall submit any required revisions within 20 days of notification by the CPM (or mutually agreed upon date). In the Annual Compliance Reports, the project owner shall document the actual waste management methods used during the year compared to planned management methods.

WASTE-4: The project owner shall have a Registered Professional Engineer or Geologist, with experience in remedial investigation and feasibility studies, available for consultation during soil excavation and grading activities. The Registered Professional Engineer or Geologist shall be given full authority to

oversee any earth moving activities that have the potential to disturb contaminated soil.

Verification: At least 30 days prior to the start of site mobilization, the project owner shall submit the qualifications and experience of the Registered Professional Engineer or Geologist to the CPM for approval.

WASTE-5: If potentially contaminated soil is unearthed during excavation at either the proposed site or linear facilities as evidenced by discoloration, odor, detection by handheld instruments, or other signs, the Registered Professional Engineer or Geologist shall inspect the site, determine the need for sampling to confirm the nature and extent of contamination, and file a written report to the project owner and CPM stating the recommended course of action. Depending on the nature and extent of contamination, the Registered Professional Engineer or Geologist shall have the authority to temporarily suspend construction activity at that location for the protection of workers or the public. If, in the opinion of the Registered Professional Engineer or Geologist, significant remediation may be required, the project owner shall contact representatives of the Los Angeles Regional Water Quality Control Board, the Glendale Regional Office of the California Department of Toxic Substances Control, the CPM, and other local agencies, if applicable, for guidance and possible oversight.

Verification: The project owner shall submit any reports filed by the Registered Professional Engineer or Geologist to the CPM and the City of El Segundo Fire Department within 5 days of their receipt. The project owner shall notify the CPM within 24 hours of any orders issued to halt construction.

WASTE-6: Before demolition of the fuel oil tanks, the existing generator buildings, and any other building, the project owner shall prepare a Remedial Investigation Workplan (RI Workplan). This plan shall include a detailed site characterization plan with soil and groundwater sampling and analysis to determine the extent and nature of contamination existing beneath these structures. The RI Workplan shall be provided to the Glendale Regional Office of the California Department of Toxic Substances Control, the Los Angeles Regional Water Quality Control, the City of El Segundo Fire Department, and other local agencies, if applicable, for review and comment, and to the CEC CPM for review and approval. If contaminated soil or groundwater is found to exist, the project owner shall contact representatives of the above-named agencies for further guidance and possible oversight. In no event shall the project owner proceed with site preparation or construction activities at any location on the site where hazardous waste contamination is found to be present until that location is either remediated or shown to pose an insignificant risk to humans and the environment as demonstrated to the satisfaction of the LARWQCB, DTSC, and the CPM.

Verification: At least sixty (60) days prior to commencement of tank or structure demolition, the project owner shall provide the RI Workplan to the Glendale Regional Office of the California Department of Toxic Substances Control, the Los Angeles Regional Water Quality Control, the City of El Segundo Fire Department, other local agencies, if applicable, and the CEC CPM. Within thirty (30) days of completion of the sampling and analysis and prior to the initiation of any construction activities, the

project owner shall provide the results of the sampling and analysis to the Glendale Regional Office of the California Department of Toxic Substances Control, the Los Angeles Regional Water Quality Control, the City of El Segundo Fire Department, other local agencies, if applicable, and the CPM for review and guidance on possible remediation.

WASTE-7: Before demolition of the fuel oil tanks, the existing generator buildings, and any other building, the project owner shall ensure that the entire site is surrounded by a berm or other solid structures capable of containing any runoff from the site and preventing this runoff from leaving the site. In no event shall the project owner proceed with site preparation or construction activities at any location on the site where hazardous waste contamination is found to be present until that location has such containment in place to the satisfaction of the CPM.

Verification: At least thirty (30) days prior to commencement of site preparation activities, the project owner shall provide written plans on containment to the CPM for review and approval.

WASTE-8: Prior to modification or demolition of existing structures, the project owner shall complete and submit a survey of all Asbestos-Containing Materials (ACM) and Regulated Building Materials (RBM) that contain lead-based paint to the El Segundo Fire Department for review and comment and to the CPM for approval. After receiving approval, the project owner shall remove all ACM and RBM from the site prior to demolition.

Verification: No less than sixty (60) days prior to commencement of structure demolition, the project owner shall provide the survey to the El Segundo Fire Department for review and comment, and to the CPM for review and approval. The project owner shall inform the CPM, via the monthly compliance report, of the date when all ACM and RBM were removed from the site.

WORKER SAFETY AND FIRE PROTECTION

WORKER SAFETY-1: The project owner shall submit to the Compliance Project Manager (CPM) for approval, a copy of the Project Demolition and Construction Safety and Health Program containing the following:

- A Demolition and Construction Injury and Illness Prevention Program;
- A Demolition and Construction Personal Protective Equipment Program;
- A Demolition and Construction Exposure Monitoring Program;
- A Demolition and Construction Emergency Action Plan; and
- A Demolition and Construction Fire Protection and Prevention Plan.

The Injury and Illness Prevention Program, the Personal Protective Equipment Program, and the Exposure Monitoring Program shall be submitted to the CPM for review and comment concerning compliance of the program with all applicable Safety Orders. The Demolition and Construction Fire Protection and Prevention Plan and Emergency Action Plan shall be submitted to the City of El Segundo Fire Department for review and comment prior to submittal to the CPM.

Verification: At least 30 days prior to the start of demolition, the project owner shall submit to the CPM for review and approval a copy of the Project Demolition and Construction Safety and Health Program. The project owner shall provide a letter from the City of El Segundo Fire Department stating that they have reviewed and commented on the Demolition and Construction Fire Protection and Prevention Plan and Emergency Action Plan.

WORKER SAFETY-2: The project owner shall submit to the CPM for approval a copy of the Project Operations and Maintenance Safety and Health Program containing the following:

- An Operation Injury and Illness Prevention Plan;
- An Emergency Action Plan;
- Hazardous Materials Management Program;
- Fire Protection and Prevention Program (8 CCR § 3221); and;
- Personal Protective Equipment Program (8 CCR §§ 3401-3411).

The Operation Injury and Illness Prevention Plan, Emergency Action Plan, and Personal Protective Equipment Program shall be submitted to the Cal/OSHA Consultation Service, for review and comment concerning compliance of the program with all applicable Safety Orders. The Operation Fire Protection Plan and the Emergency Action Plan shall also be submitted to the City of El Segundo Fire Department for review and comment.

Verification: At least 30 days prior to the start of operation, the project owner shall submit to the CPM and the City of El Segundo Fire Department a copy of the Project Operations and Maintenance Safety & Health Program.

WORKER SAFETY-3: Before using one of the fuel oil storage tanks as a clean soils storage area, the project owner shall ensure that the integrity of the floor has not been compromised by cracks or holes, the tanks have been thoroughly cleaned, no airborne hydrocarbons are present above the method detection level of a hand-held PID hydrocarbon vapor detector, and that the earth-moving vehicles used are equipped with environmental cabs.

Verification: At least 30 days prior to the start of using the tanks as a storage area, the project owner shall submit to the CPM a report verifying the integrity of the floor, describing the results of the PID monitoring, and a statement that all earth-moving vehicles used are equipped with properly functioning environmental cabs.

VISUAL RESOURCES

VIS-3 Design treatment of seawall. The project owner shall construct the proposed seawall with architectural design treatment to reduce visual monotony, enhance design quality and interest, and discourage graffiti. Techniques may include pre-cast or cast-in-place texturing, split-faced concrete block, or other methods feasible to produce a textured surface.

Prior to the start of construction, the project owner shall submit a design plan for the seawall to the Coastal Commission and City of El Segundo for review and comment, and to the CPM for review and approval. The treatment plan shall include:

1) Specification, and 11" x 17" color elevations, of the treatment proposed for use on the seawall;

2) A detailed schedule for completion of construction; and,

3) A procedure to ensure proper maintenance, including graffiti removal, for the life of the project.

Seawall construction shall not commence until the design plan has been approved by the CPM.

Verification: At least 120 days prior to start of construction, the project owner shall submit the seawall design plan to the Coastal Commission and City of El Segundo for review and comment and to the CPM for review and approval.

If the CPM notifies the project owner of any revisions that are needed before the CPM will approve the plan, the project owner shall submit a revised plan to the CPM.

Not less than 30 days prior to start of commercial operation, the project owner shall notify the CPM that the seawall is ready for inspection.

The project owner shall provide a status report regarding wall maintenance in the Annual Compliance Report.

VIS-5 Structure surface painting and treatment. Prior to the start of commercial operation, the project owner shall paint or treat portions of Units 5, 6 and 7 structures visible to the public, such that their colors minimize visual intrusion and contrast by blending with the landscape; their surfaces do not create glare; and they are consistent with local laws, ordinances, regulations, and standards.

Prior to the start of construction, the project owner shall submit to the Coastal Commission and the Cities of El Segundo and Manhattan Beach for review and comment, and to the CPM for review and approval, a specific treatment plan

whose proper implementation will satisfy these requirements. The treatment plan shall include:

a) Specification, and 11" x 17" color simulations at life size scale, of the treatment proposed for use on project structures, including structures treated during manufacture;
b) A list of each major project structure, building, tank, transmission line tower and/or pole, and fencing/walls specifying the color(s) and finish proposed for each (colors must be identified by name and by vendor brand or a universal designation);
c) Two sets of brochures and/or color chips for each proposed color;
d) Samples of each proposed treatment and color on each material to which they would be applied that would be visible to the public;
e) A detailed schedule for completion of the treatment; and
f) A procedure to ensure proper treatment maintenance for the life of the project.

The project owner shall not specify to the vendors the treatment of any buildings or structures treated during manufacture, or perform the final treatment on any buildings or structures treated on site, until the project owner receives notification of approval of the treatment plan by the CPM.

Verification: The project owner shall submit its proposed treatment plan at least 90 (ninety) days prior to ordering the first structures that are color treated during manufacture.

If revisions are required, the project owner shall provide the CPM with a revised plan within 30 (thirty) days of receiving notification that revisions are needed.

Prior to commercial operation, the project owner shall notify the CPM that all buildings and structures are ready for inspection.

The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report.

CONDITIONS NOT YET RESOLVED

The following table lists the Conditions of Certification that have not yet been agreed to by all of the parties and require additional discussion.

CONDITIONS NOT YET AGREED TO

Issue Area		Condition Short Description	Status	Notes
AQ	??	PM10 offsets in excess of FDOC; use of community bank	Declaration pending party review.	Staff drafting new condition based on receipt of S
AQ	??	PM10 local offsets; public health impacts to El Porto community	Evid. Hrg.	Parties to discuss local public health issues in Evi
BIO	1	Perform Impingement and Entrainment Studies	Evid. Hrg.	ESP II proposed condition under review; to be dis
BIO	2	Aquatic Filter Barrier Feasibility Study	Evid. Hrg.	ESP II proposed condition under review; to be dis
BIO	3	Reduce entrainment by annual cap or filter barrier, or equivalent technology	Evid. Hrg.	ESP II proposed condition under review; to be dis
BIO	4	Cal. Fish and Game Enforcement funds	Evid. Hrg.	ESP II proposed condition under review; to be dis
LAND	4	Off-site Staging and Laydown Property Use Information	Evid. Hrg.	Basic condition agreed to by parties. ESP II to prc staging areas are compatible with local codes. CC addressed in Evid. Hearings.
LAND	11	Provide final perimeter landscape plan with park benches	Evid. Hrg.	Basic condition agreed to by parties. COES to dis
SOC	??	Property values	Evid. Hrg.	COMB, M-P to provide proposed condition for Evi
SOC	??	Temporary lodging for construction impacts	Evid. Hrg.	COMB will present this condition at the Evidentiar
VIS	1	Facility Visual Enhancement Plan / Seawall Design Plan	Evid. Hrg.	COMB comments to be discussed in Visual works
VIS	2	Perimeter Landscape Plan	Evid. Hrg.	COES and Murphy oral comments to be discusse perimeter landscaping)
VIS	4	Architectural screening of new units	Evid. Hrg.	ESP II revisions to be discussed at Visual worksh
VIS	6	Unit 5, 6, and 7 Lighting	Evid. Hrg.	COMB comments to be discussed in Visual works
VIS	7	Modify Unit 3 and 4 lighting	Evid. Hrg.	COMB comments to be discussed in Visual works
VIS	8	Construction lighting	Evid. Hrg.	COMB comments to be discussed in Visual works
VIS	9	Temp. landscaping and 45th Street berm plan	Evid. Hrg.	COMB comments to be discussed in Visual works
VIS	10(?)	COMB proposal requires clean soil for plantings	Evid. Hrg.	COMB comments to be discussed in Visual works
FACD	GEN 6	Assign and Duties of Special Inspectors	Evid. Hrg.	Basic condition agreed to by parties COES reque to obtain local business licence
FACD	GEN 8	Obtain CBO Approval of All Completed Work	Evid. Hrg.	Basic condition agreed to by parties COES reque on file

CONDITIONS NOT YET AGREED TO

FACD	GEN 10	COES proposal requires trailer for CBO	Evid. Hrg.	COES request for CBO trailer
COM	15	Pre-construction milestones	Evid. Hrg.	ESP II objection to be discussed at Evid hearing